

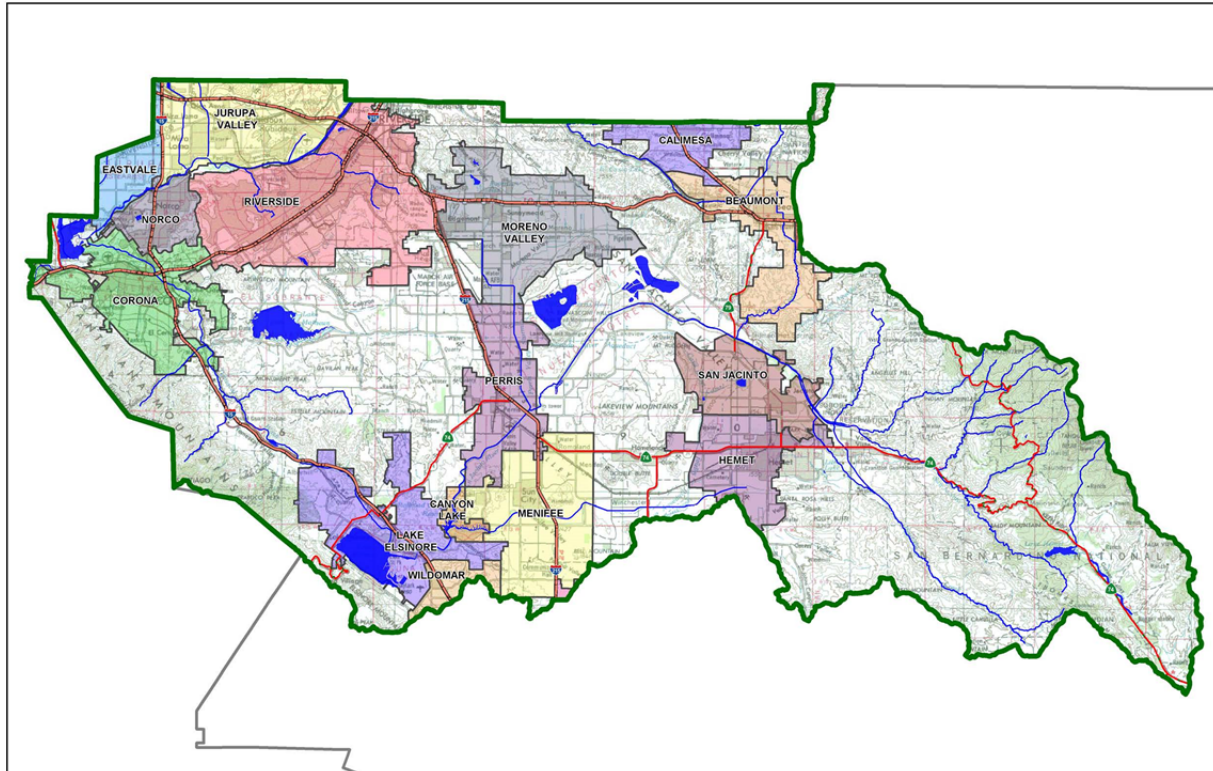
Project Specific Water Quality Management Plan

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

Project Title: NO WORRIES! RV AND BOAT STORAGE

Development No: PPT210135

Design Review/Case No: PPT210135



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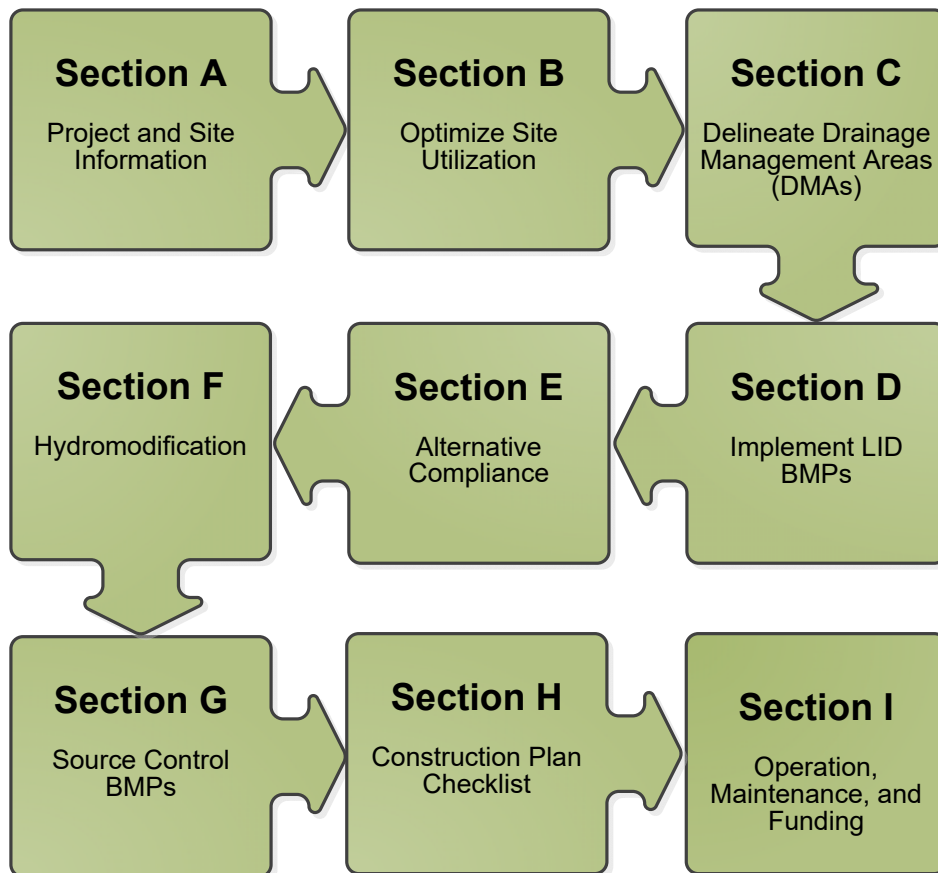
Template revised June 30, 2016

**RIVERSIDE COUNTY
TRANSPORTATION DEPT
WQMP
PRELIMINARY
APPROVAL**

Date: 11/23/22 By: R.TEBBEN

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 NO WORRIES! RV AND BOAT STORAGE LLC by HZAYEN DESIGN GEOUN, INC. for the RV AND BOAT STORAGE/PARKING LOT project.

This WQMP is intended to comply with the requirements of RIVERSIDE COUNTY for R8-2010-0033 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 Riverside county RIVERSIDE COUNTY Water Quality Ordinance (Municipal Code Section R8-2010-0033).

"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."

Preparer's Signature

09/26/2022

Date

Ibrahim Hzayen, PE, QSD, QSP

Preparer's Printed Name

Civil Engineer, President

Preparer's Title/Position

Preparer's Licensure: C71356
 QSD/QSP 922

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Section A: Project and Site Information

PROJECT INFORMATION	
Type of Project:	Commercial RV & Boat Storage lot
Planning Area:	Harvest Valley
Community Name:	WINCHESTER
Development Name:	Harvest Valley/ Winchester/ Commercial Retail
PROJECT LOCATION	
Latitude & Longitude (DMS): 33.704360, -117.085650	
Project Watershed and Sub-Watershed: Santa Ana	
Gross Acres: 3.53	
APN(s): 462-182-018-6 & 462-185-006-4	
Map Book and Page No.: MB 7/11	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	CR
Proposed or Potential SIC Code(s)	7521
Area of Impervious Project Footprint (SF)	1780 sq ft
Total Area of <u>proposed</u> Impervious Surfaces within the Project Footprint (SF)/or Replacement	1780 sq ft
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 Footprint (SF)	0
Is the project located within any MSHCP Criteria Cell?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
If so, identify the Cell number:	N/A
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)	Report attached
What is the Water Quality Design Storm Depth for the project?	0.68

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
- BMP Locations (Lat/Long)

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
CANYON LAKE	Nutrients	Warm Freshwater Habitat	N/A

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 type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Other (please list in the space below as required)	<input type="checkbox"/> Y	<input checked="" 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.

Consideration of "highest and best use" of the discharge should also be considered. For example, Lake Elsinore is evaporating faster than runoff from natural precipitation can recharge it. Requiring infiltration of 85% of runoff events for projects tributary to Lake Elsinore would only exacerbate current water quality problems associated with Pollutant concentration due to lake water evaporation. In cases where rainfall events have low potential to recharge Lake Elsinore (i.e. no hydraulic connection between groundwater to Lake Elsinore, or other factors), requiring infiltration of Urban Runoff from projects is counterproductive to the overall watershed goals. Project proponents, in these cases, would be allowed to discharge Urban Runoff, provided they used equally effective filtration-based BMPs.

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?

Design site to drain towards existing storm drain Southwest as existing conditions

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

Development of this site will create pervious surface parking for rv and and boats

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

Development of this site will create pervious surface parking for rv and and boats

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

Development of this site will create pervious surface parking for rv and and boats

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

Development of this site will create pervious surface parking for rv and and boats

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) ¹²	Area (Sq. Ft.)	DMA Type
DMA1	GRAVEL	69,656	TYPE D
DMA2	GRAVEL	84,352	TYPE D
DMA3	MULTI SURFACE	40,940	TYPE D (OFFSITE)
DMA4	MULTI SURFACE	11,315	TYPE D (OFFSITE)
DMA4	MULTI SURFACE	11,752	TYPE D (OFFSITE)

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

²If multi-surface provide back-up

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

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)

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	Impervious fraction	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
DMA1	BIORETENTION BASIN 1
DMA2	BIORETENTION BASIN 2
DMA3 – offsite mitigation	BIORETENTION BASIN 1&2
DMA4 – offsite mitigation	BIORETENTION BASIN 1&2
DMA5 – offsite mitigation	BIORETENTION BASIN 1&2

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; proceed to section D.3

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 Copermitee 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: DMA 1-2-3	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 Copermittee).
- 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 none 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: Insert Area (Acres)

Type of Landscaping (Conservation Design or Active Turf): List Landscaping Type

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: Insert Area (Acres)

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: EIATIA Factor

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: Insert Area (Acres)

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)
Insert Area (Acres)	Insert Area (Acres)

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: Number of daily Toilet Users

Project Type: Enter 'Residential', 'Commercial', 'Industrial' or 'Schools'

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: Insert Area (Acres)

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

Enter your TUTIA factor: TUTIA Factor

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: Required number of toilet 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)
Insert Area (Acres)	Insert Area (Acres)

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.

Insert narrative description here.

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 2-4 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

Enter the factor from Table 2-4: Enter Value

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 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 projected average daily use (Step 1) to the minimum required non-potable use (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 per Section 3.4.2 of the WQMP Guidance Document.

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	
DMA 1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DMA 2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DMA 3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DMA 4	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DMA 5	<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"/>	<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.

DMA 3 , DMA 4 & DMA5 ARE offsite improvements mitigated onsite

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	Enter BMP Name / Identifier Here		
	[A]				[C]				[A] x [C]
DMA 1	69656	GRAVEL	0.1	0.11	7694.1	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
DMA 2	84352	GRAVEL	0.1	0.11	9317.4			
DMA 3	40940	GRAVEL	0.79	0.59	24060			
DMA 4	11315	GRAVEL	0.81	0.61	6915.3			
DMA 5	11752	GRAVEL	0.81	0.61	7182.3			
	$A_T = \Sigma[A]$	218,015			$\Sigma =$ [55,169.1]	[0.68]	3,126.25	3,134.00

[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 Development 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 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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" 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
<i>Total Credit Percentage¹</i>	

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			
	[A]		[B]	[C]	[A] x [C]				
						<i>Design Storm Depth (in)</i>	<i>Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)</i>	<i>Total Storm Water Credit % Reduction</i>	<i>Proposed Volume or Flow on Plans (cubic feet or cfs)</i>
	$A_T = \sum[A]$				$\sum = [D]$	[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 for Flow-Based Treatment Control BMPs [E] = .2, for Volume-Based Control Treatment BMPs, [E] 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 Percentage ³	Efficiency

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	40.9	40.9	0
Volume (Cubic Feet)	0.658	0.608	-0.05

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 Susceptibility 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:

INSERT TEXT HERE

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.

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

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)	BMP Location (Lat/Long)

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.

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: The Bioretention Facility area shall be inspected for erosion, dead vegetation, soggy soils, or standing water. The use of fertilizers and pesticides on the plants inside the Bioretention Facility should be minimized.

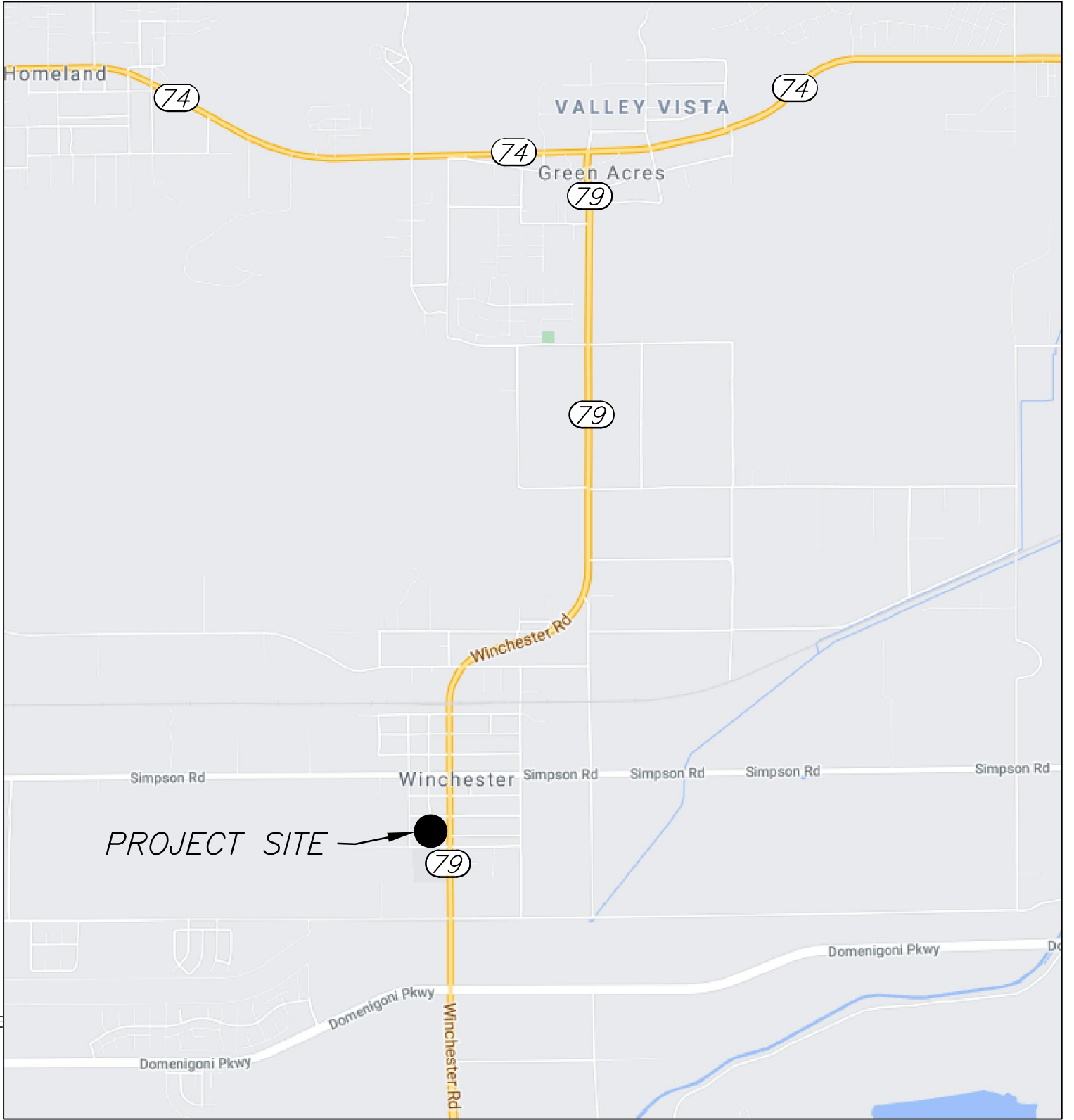
Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

Y N

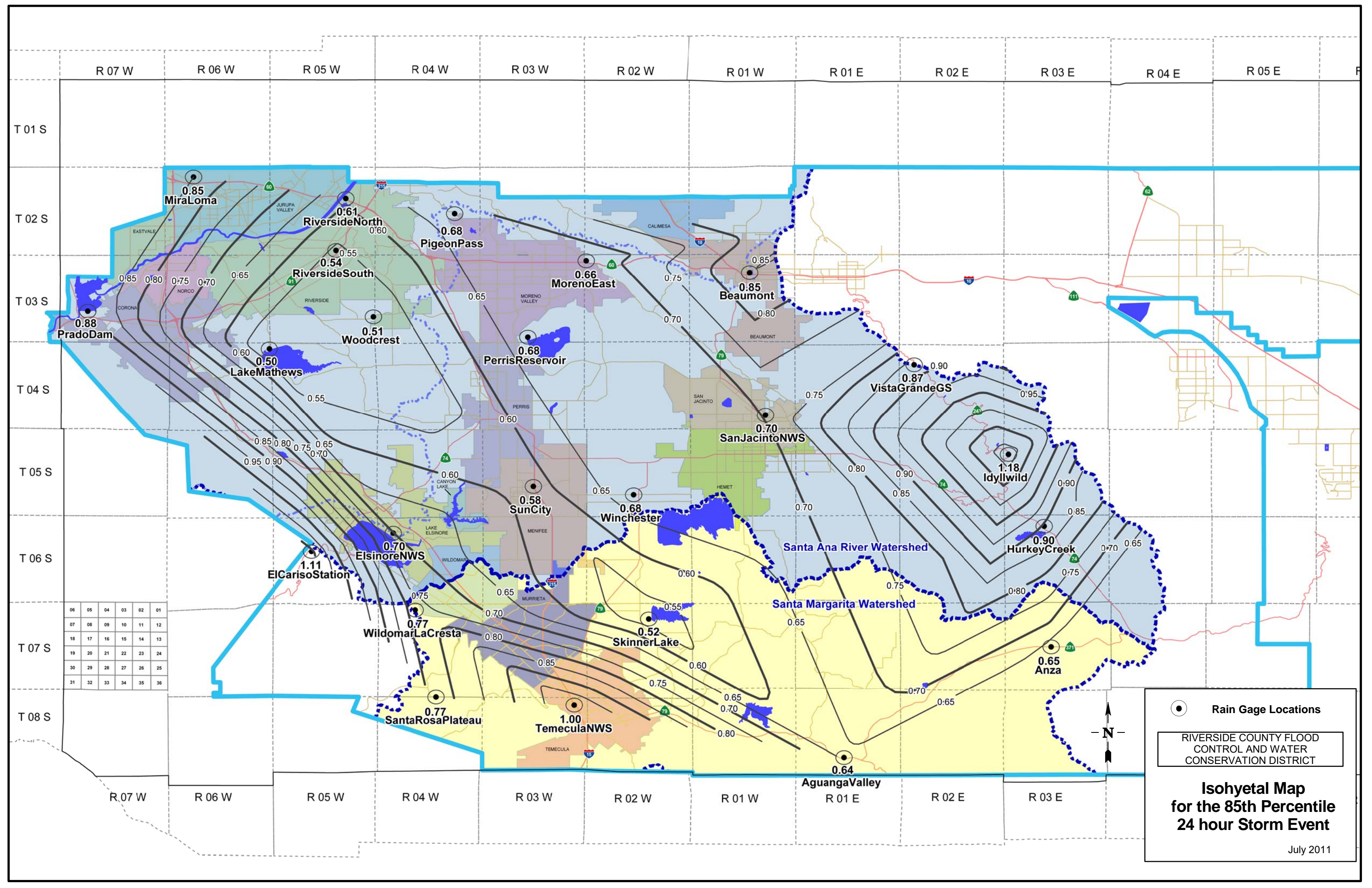
Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

Appendix 1: Maps and Site Plans

Location Map, WQMP Site Plan and Receiving Waters Map



LOCATION MAP
NTS



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

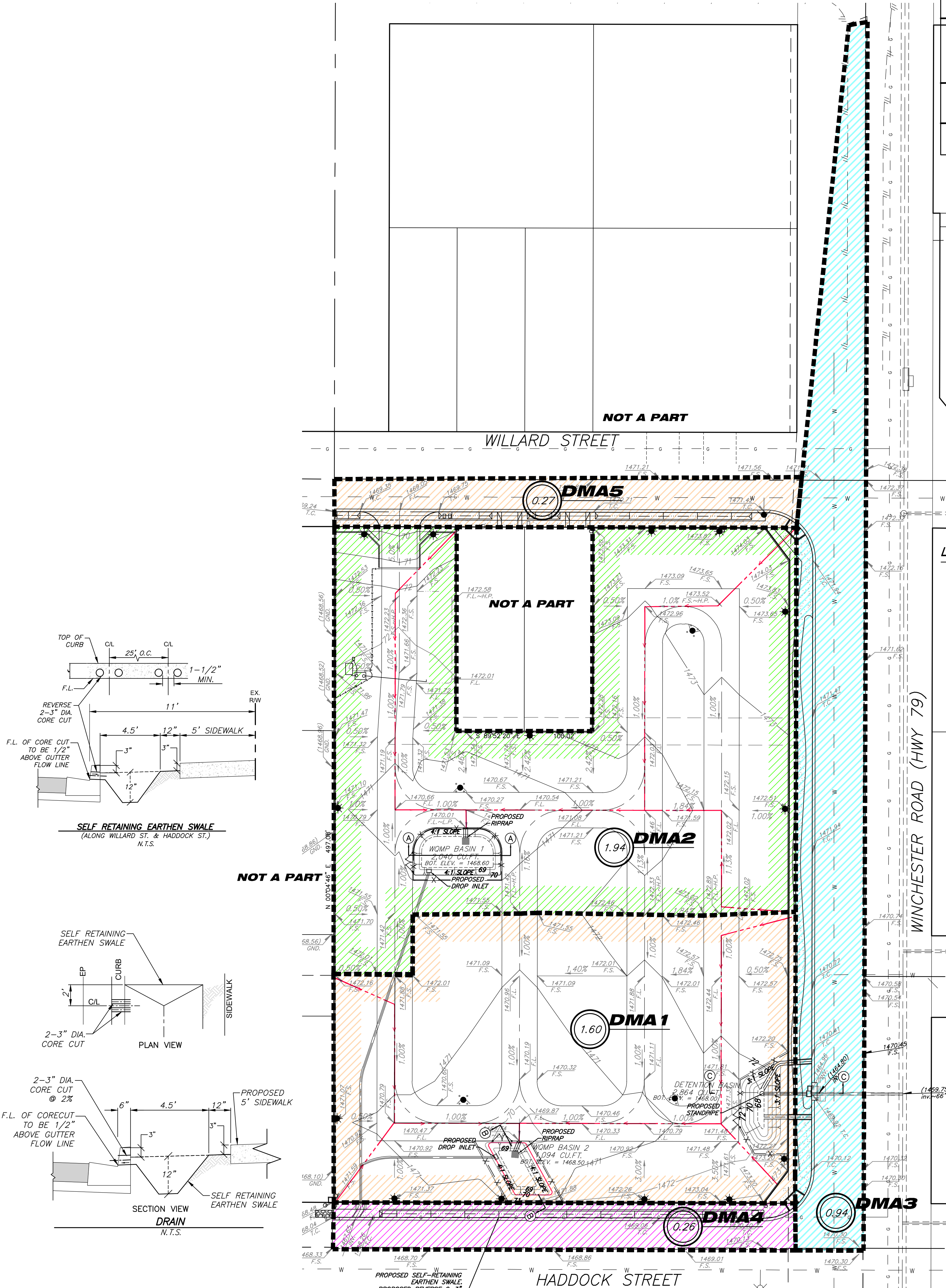
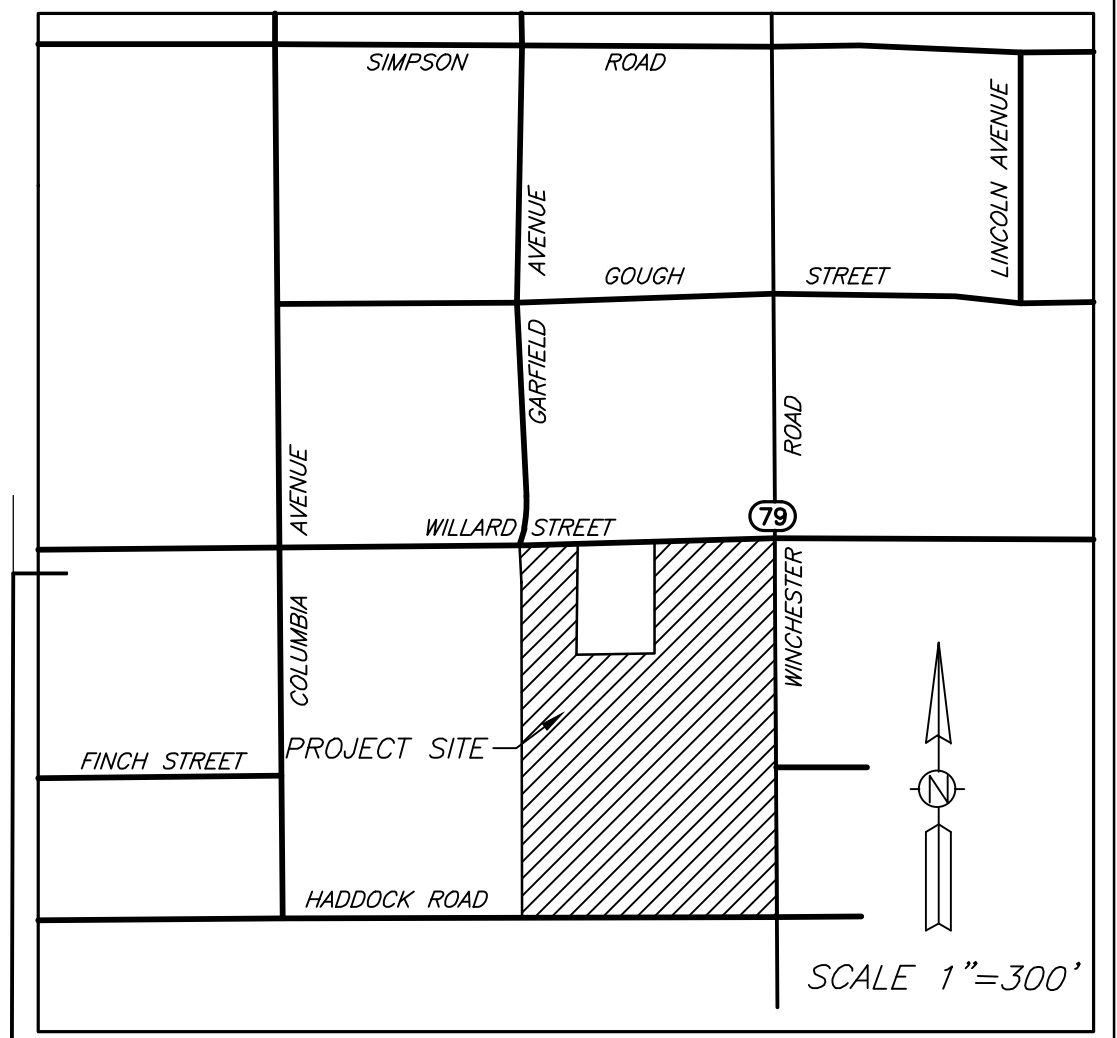
Isohyetal Map for the 85th Percentile 24 hour Storm Event

July 2011

WQMP MAP

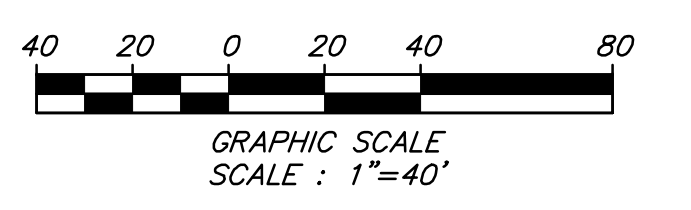
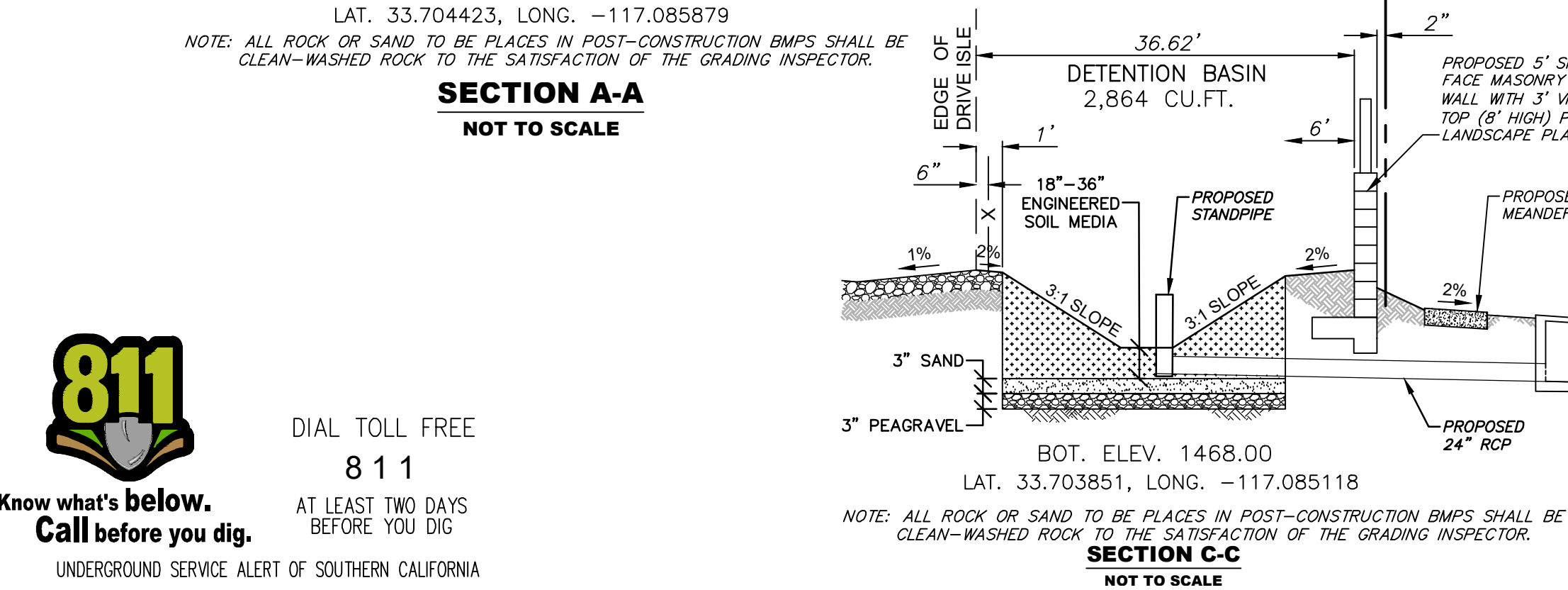
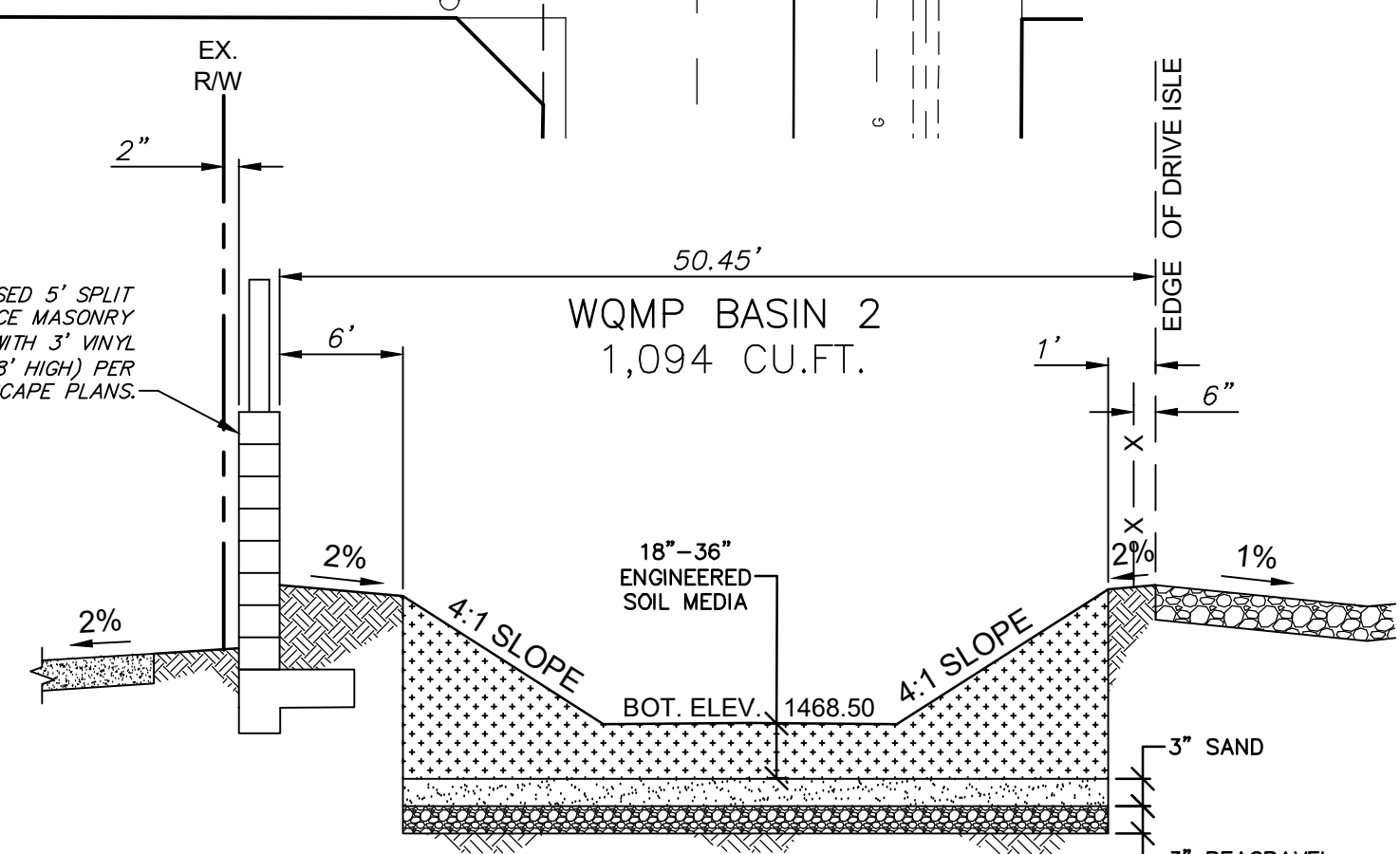
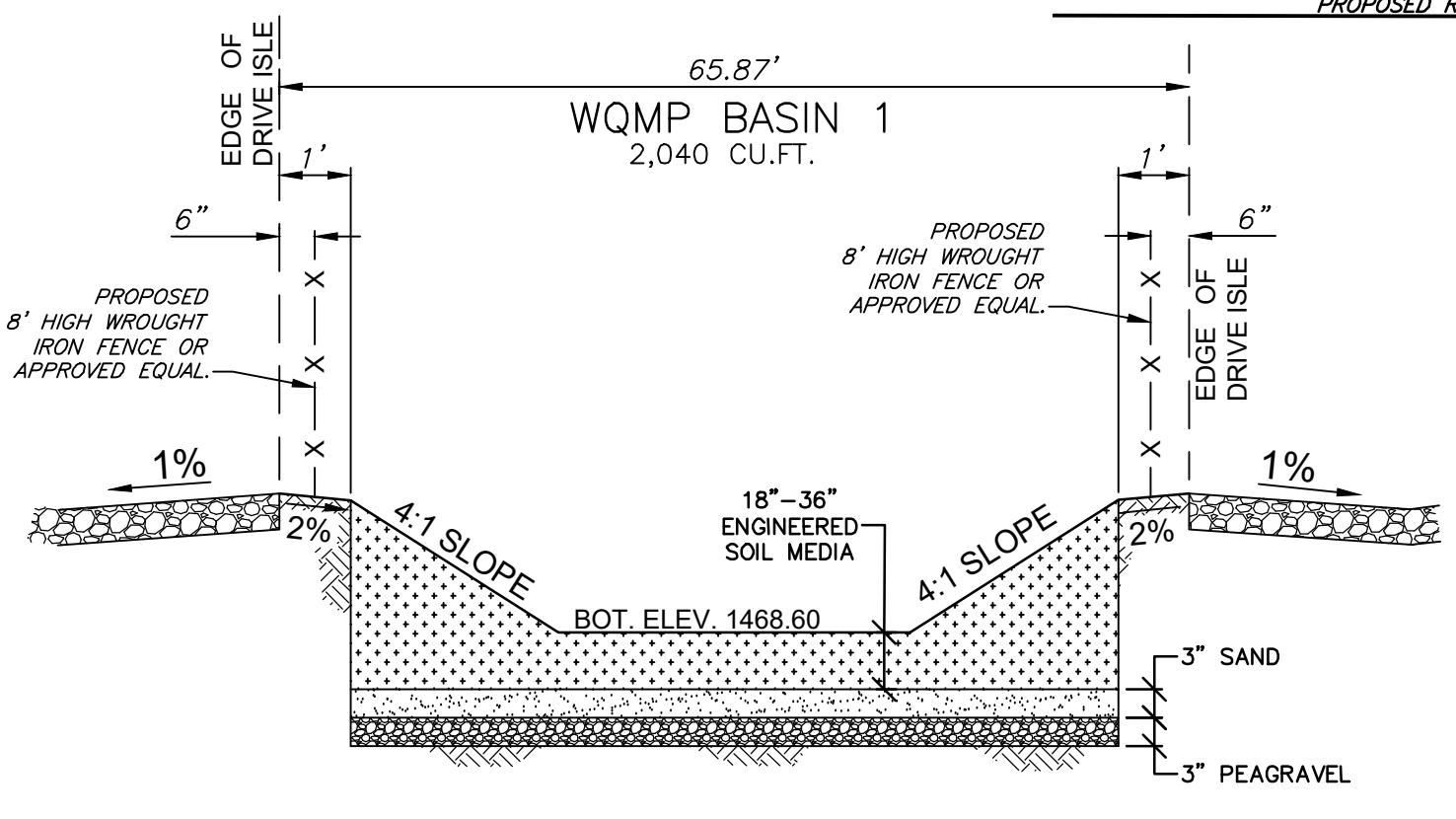
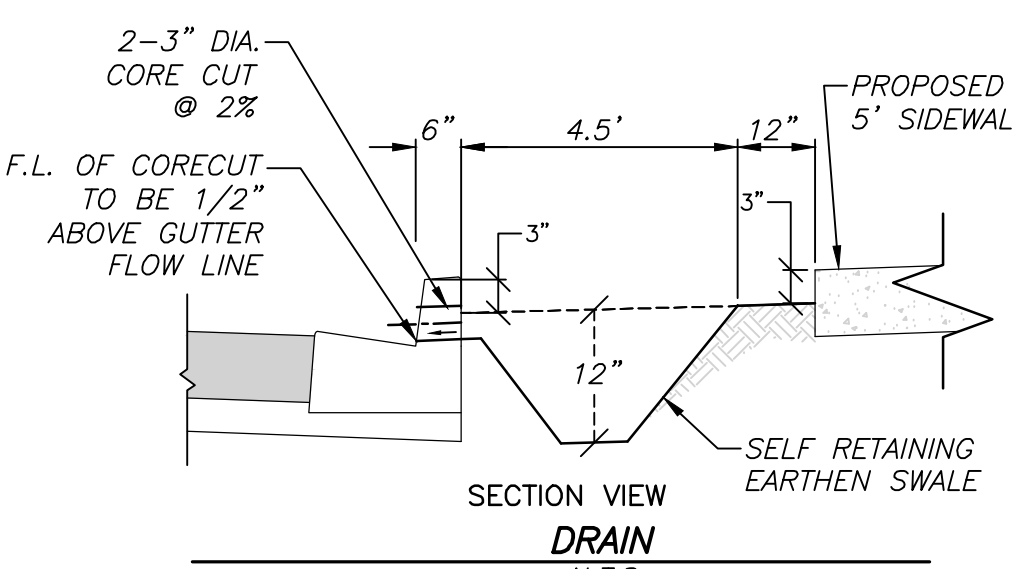
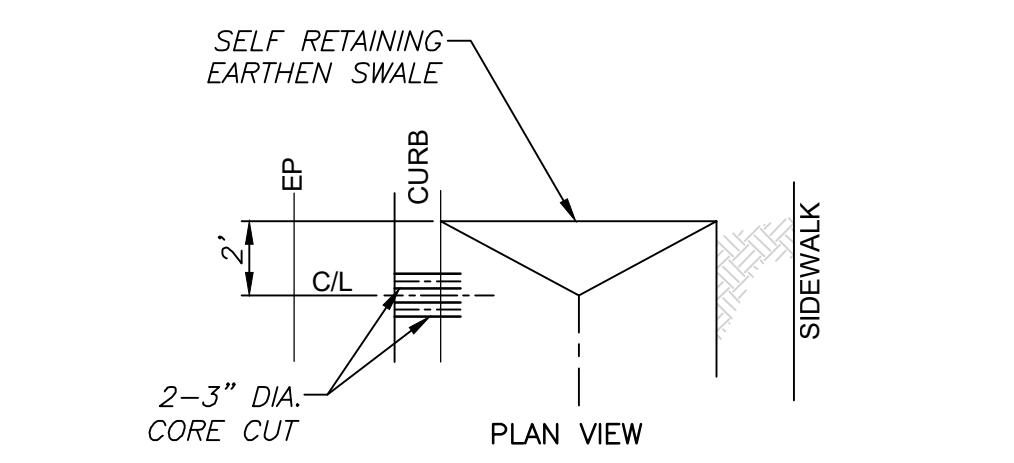
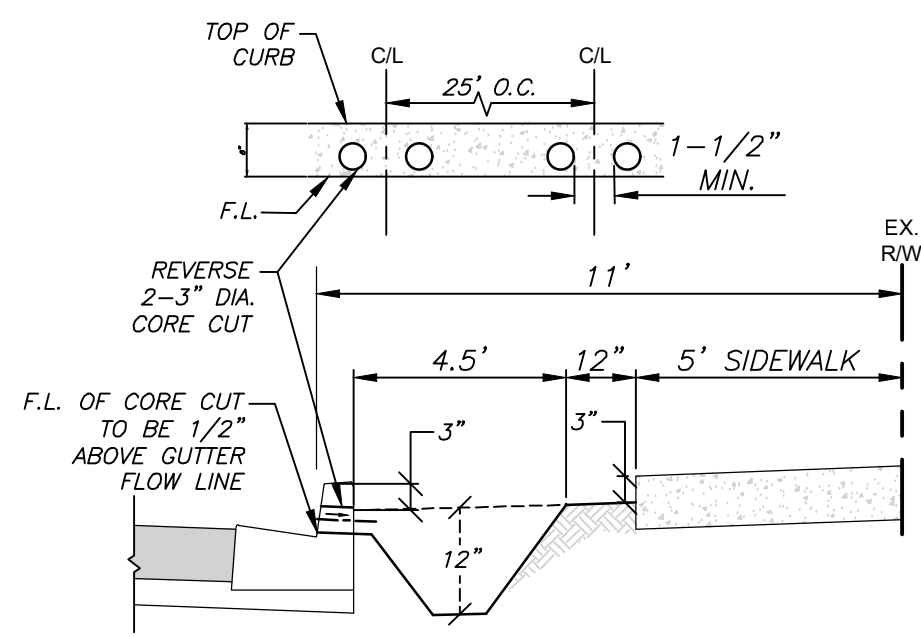
COUNTY OF RIVERSIDE

NO WORRIES! RV AND BOAT STORAGE



LEGEND & ABBREVIATIONS

- DAYLIGHT LINE
- TRACT BOUNDARY
- MATCH LINE
- EXISTING CONTOUR LINES
- BLOCK WALL & RETAINING WALL
- PROPOSED GRADE ELEVATIONS
- EXISTING GRADE ELEVATIONS
- DRAINAGE SWALE OR DIRECTION OF FLOW
- SLOPE BANK (2:1) UNLESS OTHERWISE SHOWN
- DRAINAGE AREA
- TC TOP OF CURB
- FL FLOWLINE
- FS FINISH SURFACE
- FG FINISH GRADE
- TW TOP OF WALL
- TF TOP OF FOOTING
- BW BACK OF WALK
- GR EX. GROUND
- 44.5 PAD ELEVATION



811
DIAL TOLL FREE
8 1 1
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

RIVERSIDE COUNTY
WQMP EXHIBIT
WINCHESTER
APN: 462-182-018 & 462-185-006

SHEET
1 OF **2**

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: HZAYEN DESIGN GROUP, INC. Date: 11/2/2022
 Designed by: IBRAHIM HZAYEN Case No:
 Company Project Number/Name:
 BMP Identification:
 BMP NAME / ID: DMA1
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: D₈₅ = 0.68 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 Impermeous Fraction, I _e	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V _{cap} (cubic feet)	Proposed Volume on Plans (cubic feet)
DMA1	6956	Gravel or Class 2 Permeable Base	0.1	0.11	7694.1			
					Total	0.68	436	436

Notes:

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: HZAYEN DESIGN GROUP, INC. Date: 11/2/2022
 Designed by: IBRAHIM HZAYEN Case No:
 Company Project Number/Name:
 BMP Identification:
 BMP NAME / ID: DMA 2
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: D₈₅ = 0.68 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 Impermeous Fraction, I _e	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V _{cap} (cubic feet)	Proposed Volume on Plans (cubic feet)
DMA2	8432	Gravel or Class 2 Permeable Base	0.1	0.11	9317.4			
					Total	0.68	528	528

Notes:

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: HZAYEN DESIGN GROUP, INC. Date: 11/2/2022
 Designed by: IBRAHIM HZAYEN Case No:
 Company Project Number/Name:
 BMP Identification:
 BMP NAME / ID: DMA3
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: D₈₅ = 0.68 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 Impermeous Fraction, I _e	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V _{cap} (cubic feet)	Proposed Volume on Plans (cubic feet)
DMA3	40940	Mixed Surface Types	0.79	0.59	24060			
					Total	0.68	1363.4	1363.4

Notes:

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: HZAYEN DESIGN GROUP, INC. Date: 11/2/2022
 Designed by: IBRAHIM HZAYEN Case No:
 Company Project Number/Name:
 BMP Identification:
 BMP NAME / ID: DMA4
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: D₈₅ = 0.68 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 Impermeous Fraction, I _e	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V _{cap} (cubic feet)	Proposed Volume on Plans (cubic feet)
DMA4	11315	Mixed Surface Types	0.81	0.61	6915.3			
					Total	0.68	391.9	392

Notes:

Bioretention Facility - Design Procedure

BMP ID: DMA1 Legend: Required Entries
 Calculated Cells

Company Name: HZAYEN DESIGN GROUP, INC. Date: 1/12/2022
 Designed by: IBRAHIM HZAYEN County/City Case No.:
 Design Volume:
 Enter the area tributary to this feature: A_T = 1.6 acres
 Enter V_{BMP} determined from Section 2.1 of this Handbook: V_{BMP} = 436 ft³

Type of Bioretention Facility Design
 Side slopes required (parallel to parking spaces or adjacent to walkways)
 No side slopes required (perpendicular to parking space or Planter Boxes)

Bioretention Facility Surface Area
 Depth of Soil Filter Media Layer: d_s = 1.5 ft
 Top Width of Bioretention Facility, excluding curb: w_T = 28.0 ft
 Total Effective Depth, d_E: d_E = (0.3) x d_s + (0.4) x 1 - (0.7/w_T) + 0.5 = 1.33 ft
 Minimum Surface Area, A_M: A_M (ft²) = $\frac{V_{BMP} (ft^3)}{d_E (ft)}$ = 330 ft²
 Proposed Surface Area: A = 1,088 ft²

Bioretention Facility Properties
 Side Slopes in Bioretention Facility: z = 4 :1
 Diameter of Underdrain: 6 inches
 Longitudinal Slope of Site (3% maximum): 1 %
 6" Check Dam Spacing: 25 feet
 Describe Vegetation: Shrubs

Notes: Basin oversized to provide an offset for offsite improvements. (758 sq. ft. for offsite improvements)

Bioretention Facility - Design Procedure

BMP ID: DMA 2 Legend: Required Entries
 Calculated Cells

Company Name: HZAYEN DESIGN GROUP, INC. Date: 11/2/2022
 Designed by: IBRAHIM HZAYEN County/City Case No.:
 Design Volume:
 Enter the area tributary to this feature: A_T = 1.94 acres
 Enter V_{BMP} determined from Section 2.1 of this Handbook: V_{BMP} = 528 ft³

Type of Bioretention Facility Design
 Side slopes required (parallel to parking spaces or adjacent to walkways)
 No side slopes required (perpendicular to parking space or Planter Boxes)

Bioretention Facility Surface Area
 Depth of Soil Filter Media Layer: d_s = 1.5 ft
 Top Width of Bioretention Facility, excluding curb: w_T = 34.0 ft
 Total Effective Depth, d_E: d_E = [(0.3) x d_s + (0.4) x 1] + 0.5 = 1.35 ft
 Minimum Surface Area, A_M: A_M (ft²) = $\frac{V_{BMP} (ft^3)}{d_E (ft)}$ = 392 ft²
 Proposed Surface Area: A = 2,042 ft²
 Minimum Required Length of Bioretention Facility, L: L = 11.5 ft

Bioretention Facility Properties
 Side Slopes in Bioretention Facility: z = 4 :1
 Diameter of Underdrain: 6 inches
 Longitudinal Slope of Site (3% maximum): 1 %
 6" Check Dam Spacing: 25 feet
 Describe Vegetation: Shrubs

Notes: Basin oversized to provide an offset for offsite improvements. (1,644 sq.ft. for offsite improvements)

Bioretention Facility - Design Procedure

BMP ID: DMA3, 4 & 5 Legend: Required Entries
 Calculated Cells

Company Name: HZAYEN DESIGN GROUP, INC. Date: 11/2/2022
 Designed by: IBRAHIM HZAYEN County/City Case No.:
 Design Volume:
 Enter the area tributary to this feature: A_T = 1.47 acres
 Enter V_{BMP} determined from Section 2.1 of this Handbook: V_{BMP} = 2,162 ft³

Type of Bioretention Facility Design
 Side slopes required (parallel to parking spaces or adjacent to walkways)
 No side slopes required (perpendicular to parking space or Planter Boxes)

Bioretention Facility Surface Area
 Depth of Soil Filter Media Layer: d_s = 1.5 ft
 Top Width of Bioretention Facility, excluding curb: w_T = 34.0 ft
 Total Effective Depth, d_E: d_E = (0.3) x d_s + (0.4) x 1 - (0.7/w_T) + 0.5 = 1.33 ft
 Minimum Surface Area, A_M: A_M (ft²) = $\frac{V_{BMP} (ft^3)}{d_E (ft)}$ = 1,627 ft²
 Proposed Surface Area: A = 1,627 ft²

Bioretention Facility Properties
 Side Slopes in Bioretention Facility: z = 4 :1
 Diameter of Underdrain: 6 inches
 Longitudinal Slope of Site (3% maximum): 1 %
 6" Check Dam Spacing: 25 feet
 Describe Vegetation: Shrubs

Notes: DMA3, DMA4 & DMA5 are offsite improvements mitigated onsite with oversized WQMP basin 1 and basin 2 by 1,627 square feet.

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: HZAYEN DESIGN GROUP, INC. Date: 1/12/2022
 Designed by: IBRAHIM HZAYEN Case No:
 Company Project Number/Name:
 BMP Identification:
 BMP NAME / ID: DMA5
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: D₈₅ = 0.68 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 Impermeous Fraction, I _e	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V _{cap} (cubic feet)	Proposed Volume on Plans (cubic feet)
DMA5	11752	Mixed Surface Types	0.81	0.61	7182.3			
					Total	0.68	407	3134

Appendix 2: Construction Plans

Grading and Drainage Plans

OWNER/APPLICANT

NO WORRIES! RV AND BOAT STORAGE LLC
28447 WITHERSPOON PKWY
VALENCIA, CA 91355
OFFICE: (661) 295-1970
CONTACT NAME: TOM COMBER
CONTACT PHONE#: (661) 433-8062
EMAIL: TOM@RIVERANGELLC.COM

ENGINEER/ EXHIBIT PREPARER

HZAYEN DESIGN GROUP, INC.
360 TWILIGHT COURT,
CAMARILLO, CA 93012
OFFICE: (805) 233-7778
CONTACT: IBRAHIM HZAYEN
CELL: (818)461-2642
EMAIL: IHZAYEN@HZAYEN.COM

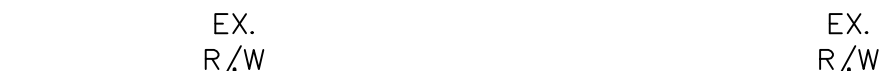
ASSESSOR'S PARCEL No.

462-182-018-6 & 462-185-006-4

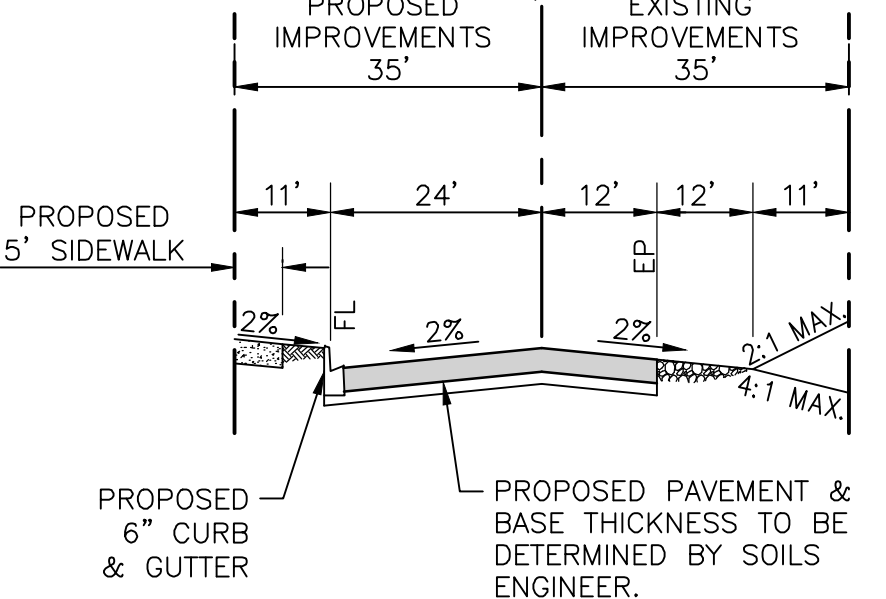
GROSS ACRES: 3.53 ACRES

NET ACRES: N/A

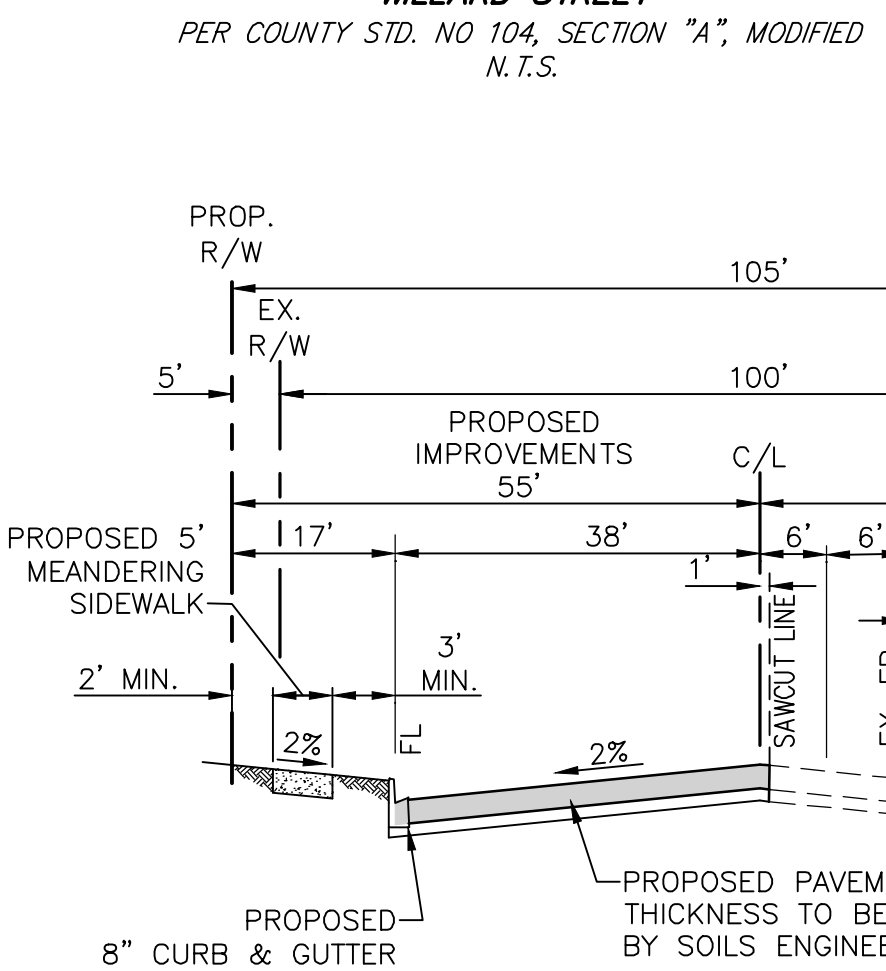
ADDRESS: 32965 WILLARD ST., WINCHESTER, CA 92596



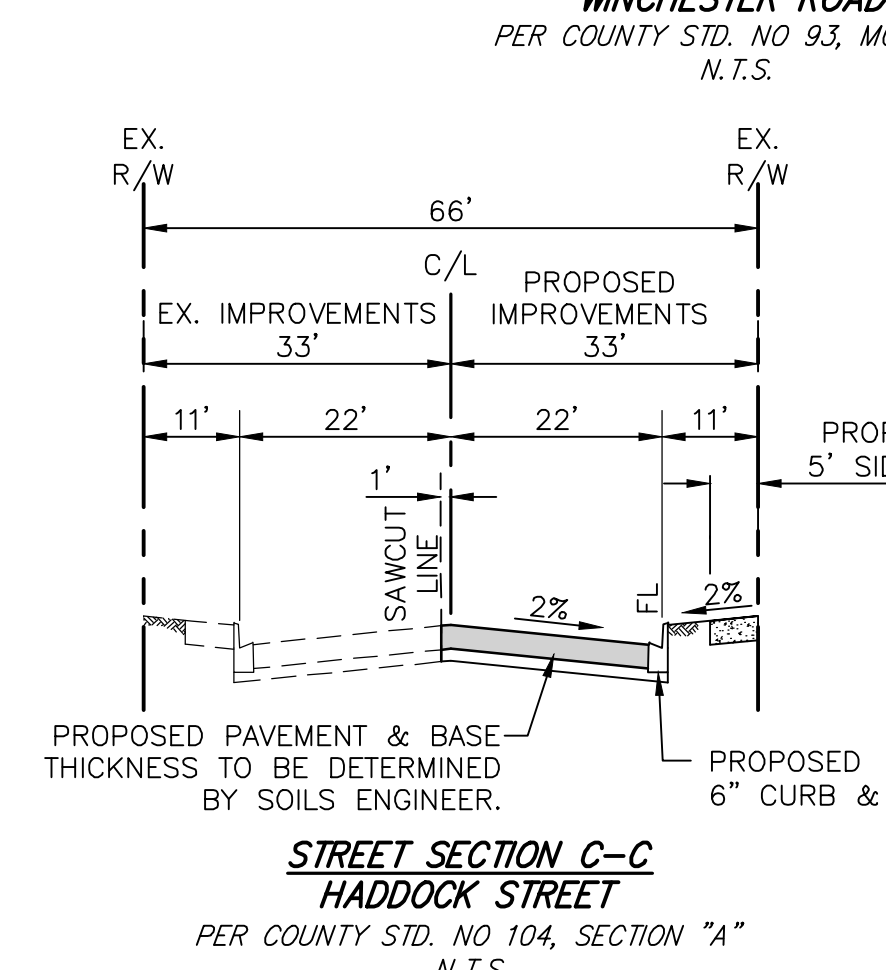
**STREET SECTION A-A
WILLARD STREET**
PER COUNTY STD. NO 104, SECTION "A", MODIFIED
N.T.S.



**STREET SECTION B-B
WINCHESTER ROAD**
PER COUNTY STD. NO 93, MODIFIED
N.T.S.



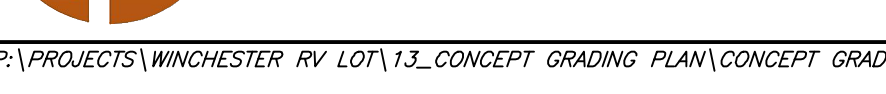
**STREET SECTION C-C
HADDOCK STREET**
PER COUNTY STD. NO 104, SECTION "A"
N.T.S.



**STREET SECTION D-D
HADDOCK STREET**
PER COUNTY STD. NO 93, MODIFIED
N.T.S.

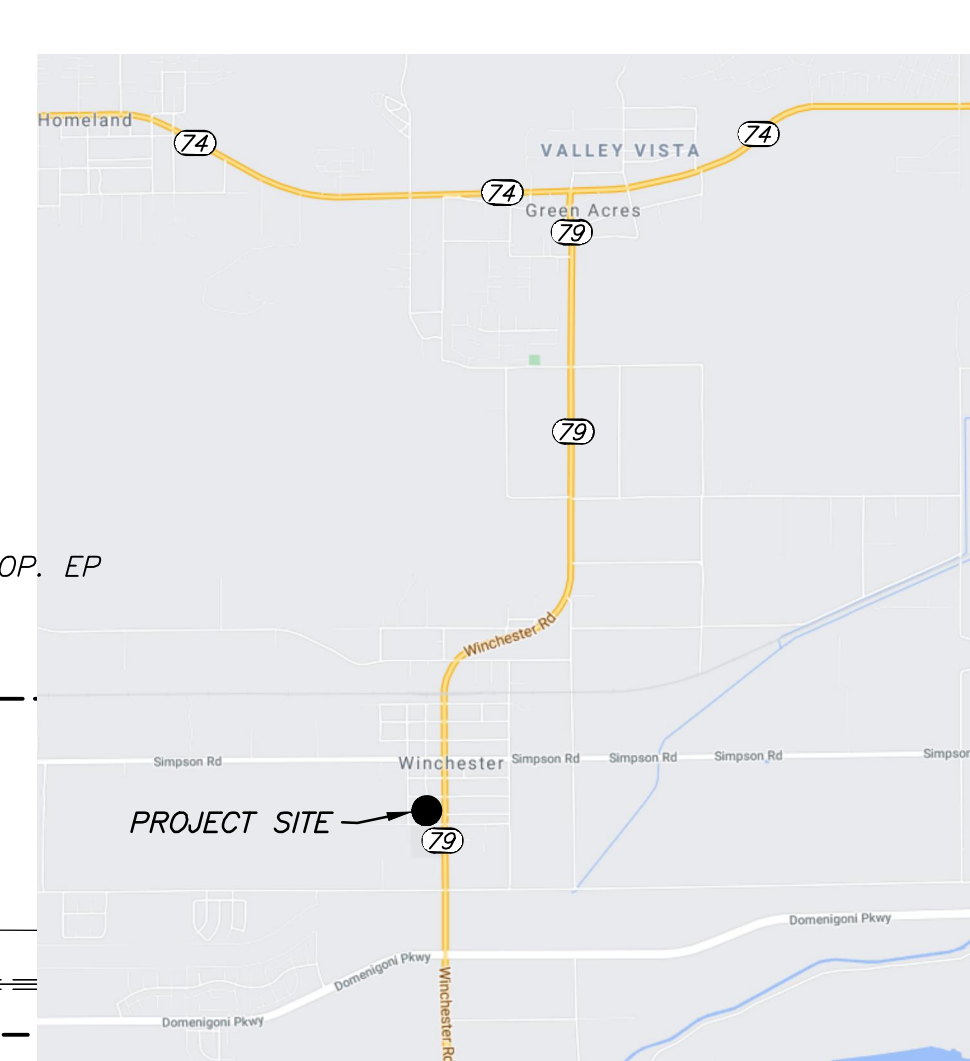
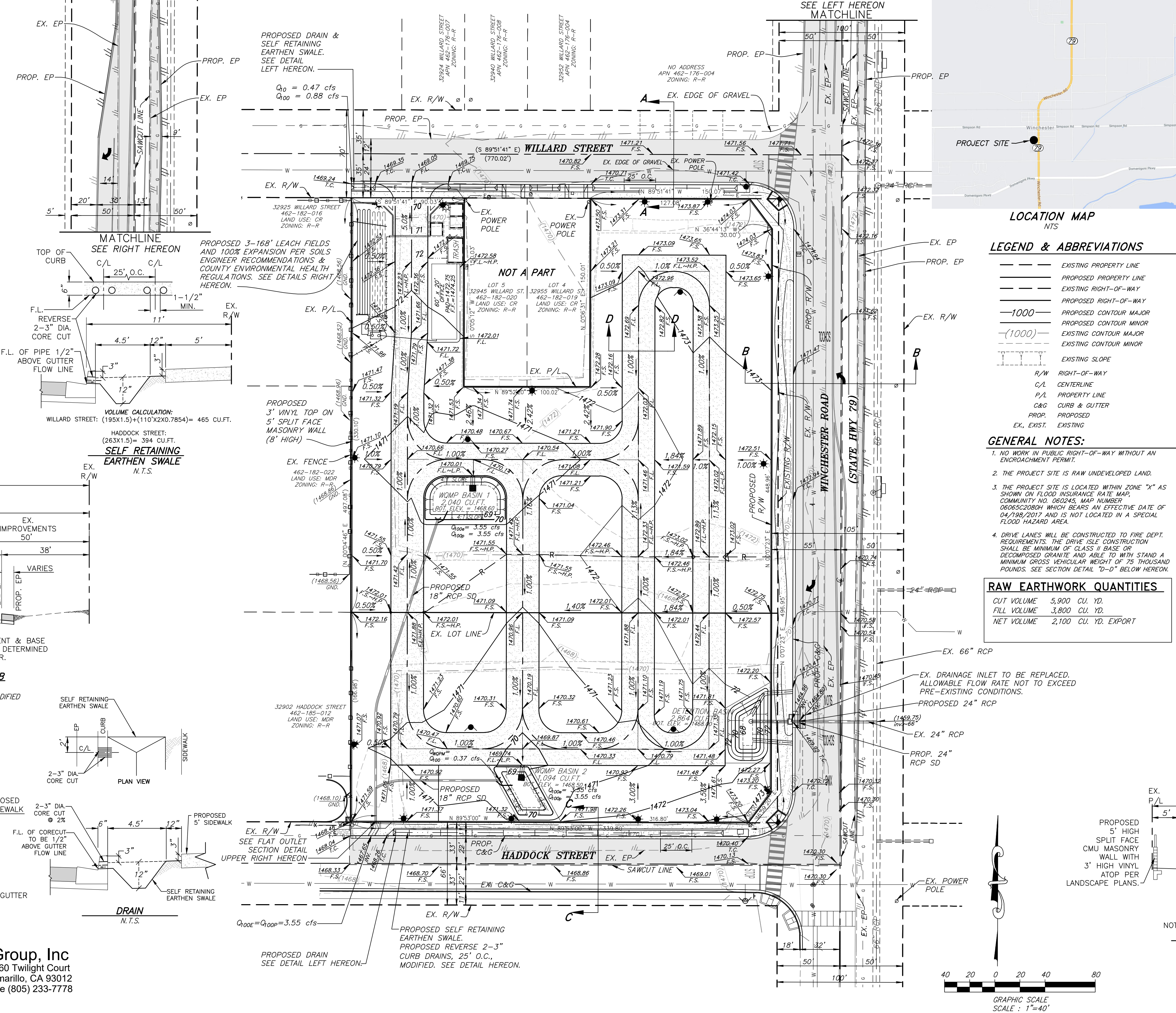


**STREET SECTION E-E
HADDOCK STREET**
PER COUNTY STD. NO 93, MODIFIED
N.T.S.

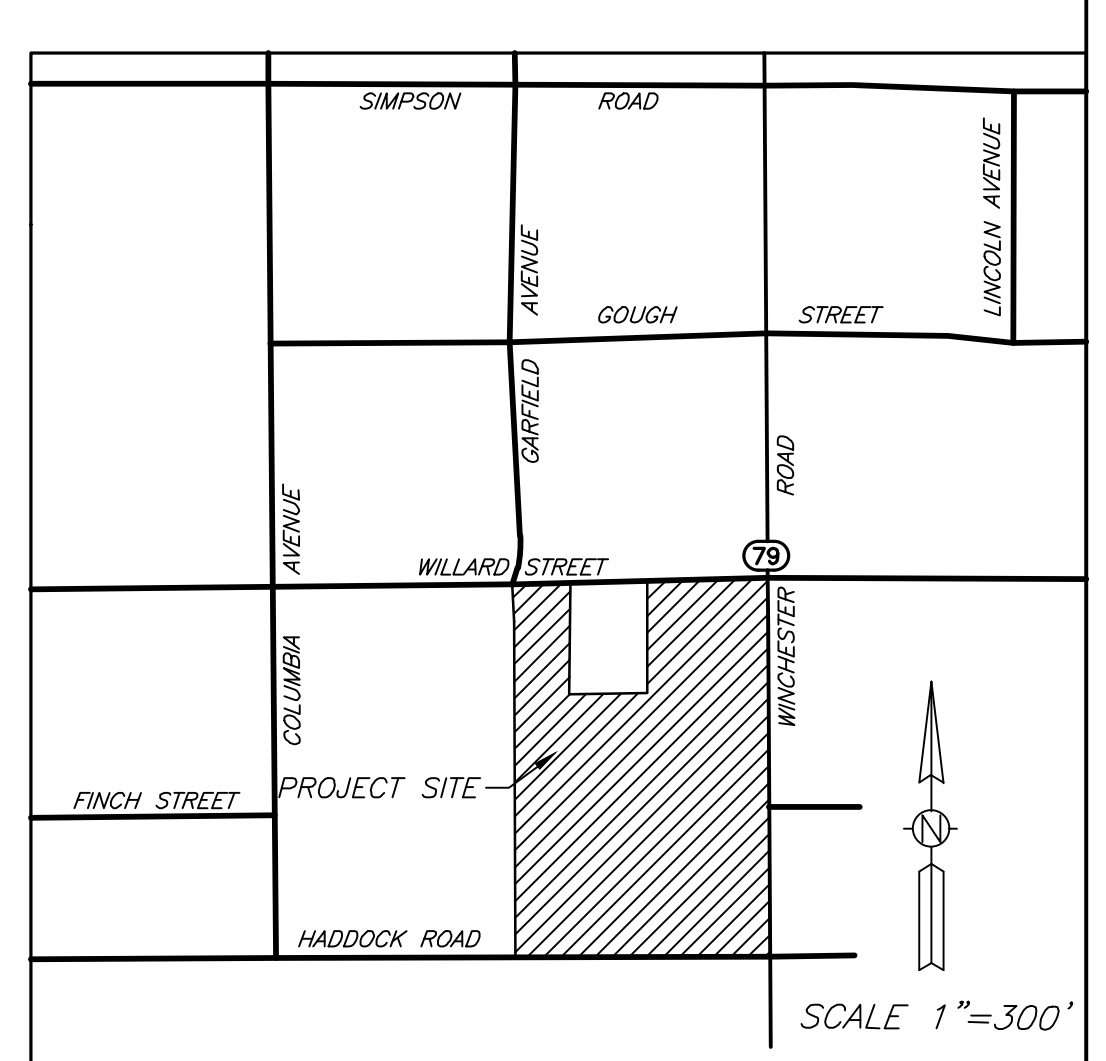


**STREET SECTION F-F
HADDOCK STREET**
PER COUNTY STD. NO 93, MODIFIED
N.T.S.

CONCEPTUAL GRADING AND DRAINAGE COUNTY OF RIVERSIDE NO WORRIES! RV AND BOAT STORAGE



LOCATION MAP
NTS



VICINITY MAP
SCALE 1"=300'

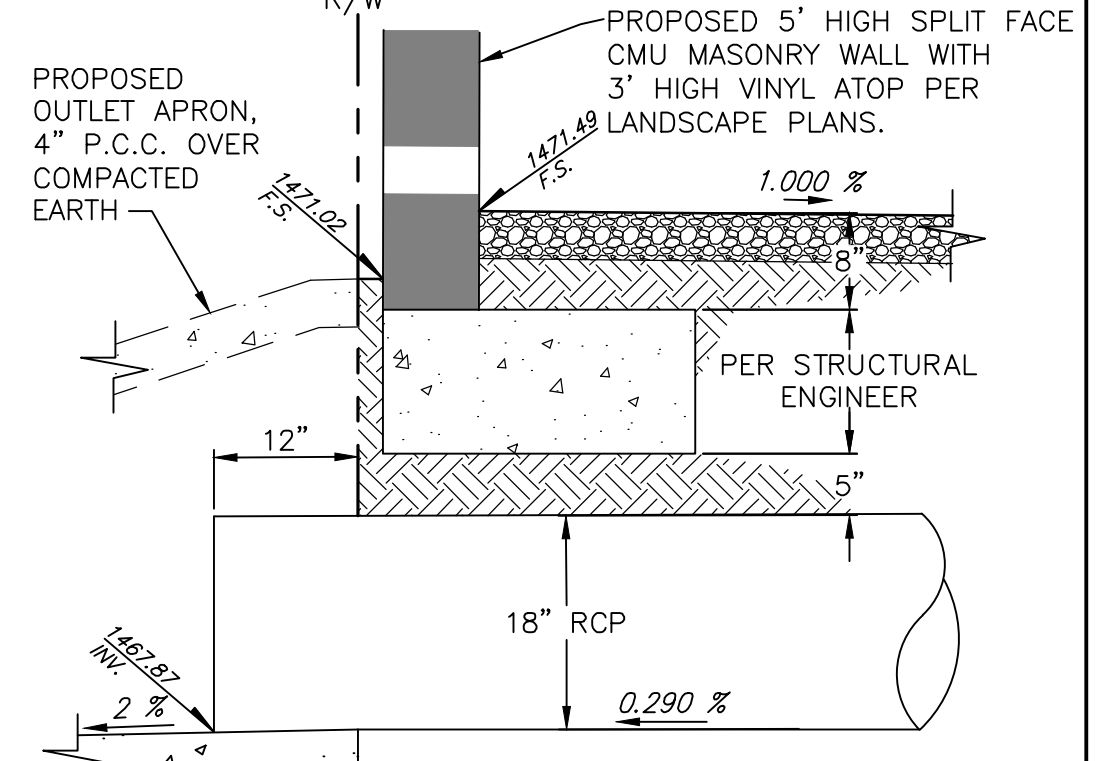
LEGEND & ABBREVIATIONS

- EXISTING PROPERTY LINE
- - - PROPOSED PROPERTY LINE
- - - EXISTING RIGHT-OF-WAY
- - - PROPOSED RIGHT-OF-WAY
- 1000 PROPOSED CONTOUR MAJOR
- (1000) PROPOSED CONTOUR MINOR
- - - EXISTING CONTOUR MAJOR
- - - EXISTING CONTOUR MINOR
- - - EXISTING SLOPE
- R/W RIGHT-OF-WAY
- C/L CENTERLINE
- P/L PROPERTY LINE
- C&G CURB & GUTTER
- PROP. PROPOSED
- EX. EXISTING

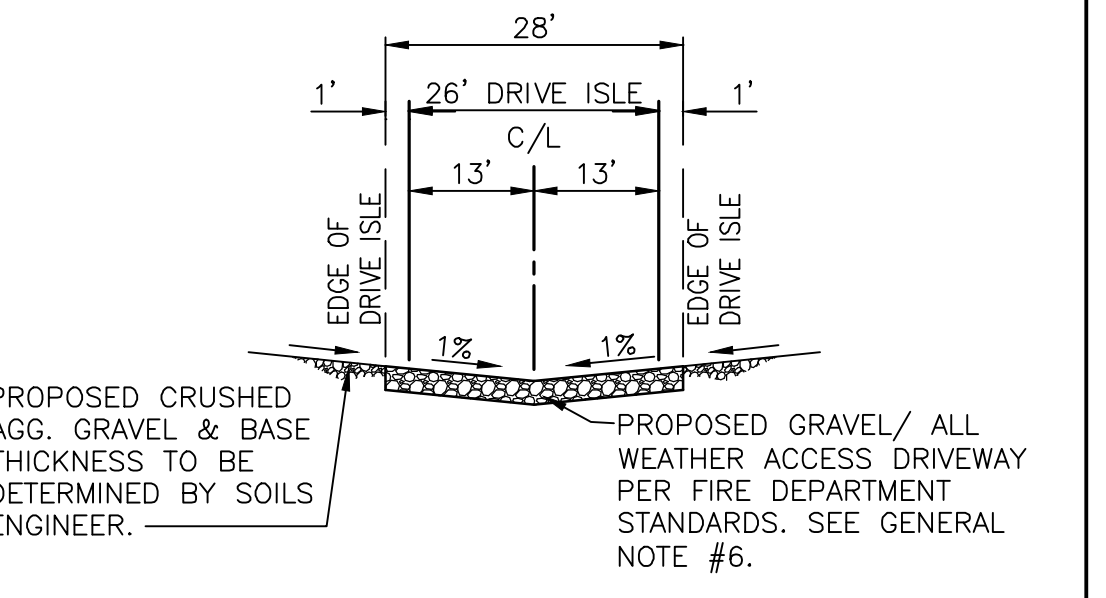
- GENERAL NOTES:**
- NO WORK IN PUBLIC RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT.
 - THE PROJECT SITE IS RAW UNDEVELOPED LAND.
 - THE PROJECT SITE IS LOCATED WITHIN ZONE "X" AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY NO. 080245, MAP NUMBER 080850808 WHICH BEARS AN EFFECTIVE DATE OF 04/19/2017 AND IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA.
 - DRIVE LANES WILL BE CONSTRUCTED TO FIRE DEPT. REQUIREMENTS. THE DRIVE ISLE CONSTRUCTION SHALL BE MINIMUM OF CLASS II BASE OR DECOMPOSED GRANITE AND ABLE TO WITH STAND A MINIMUM GROSS VEHICULAR WEIGHT OF 75 THOUSAND POUNDS. SEE SECTION DETAIL "D-D" BELOW HEREON.

RAW EARTHWORK QUANTITIES

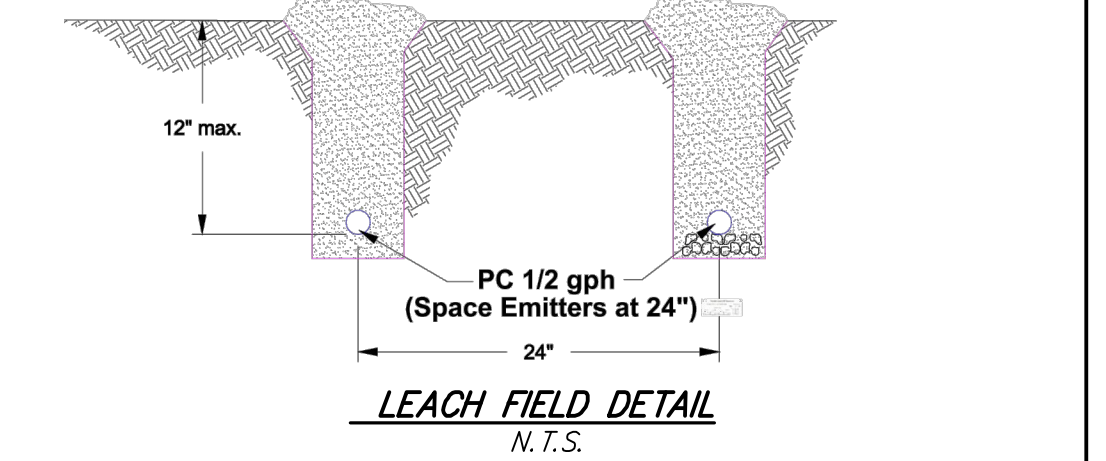
CUT VOLUME	5,900 CU. YD.
FILL VOLUME	3,800 CU. YD.
NET VOLUME	2,100 CU. YD. EXPORT



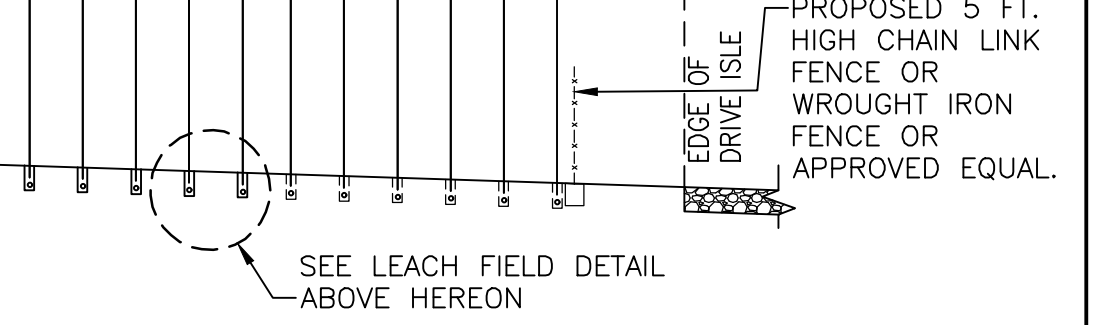
FLAT OUTLET DRAINAGE SECTION DETAIL
N.T.S.
(FLAT OUTLET STRUCTURE RIVERSIDE COUNTY STD. NO. 303)



DRIVE ISLE SECTION D-D
N.T.S.



LEACH FIELD DETAIL
N.T.S.



LEACH FIELD SEPARATION DETAIL
N.T.S.

EXHIBIT "G"

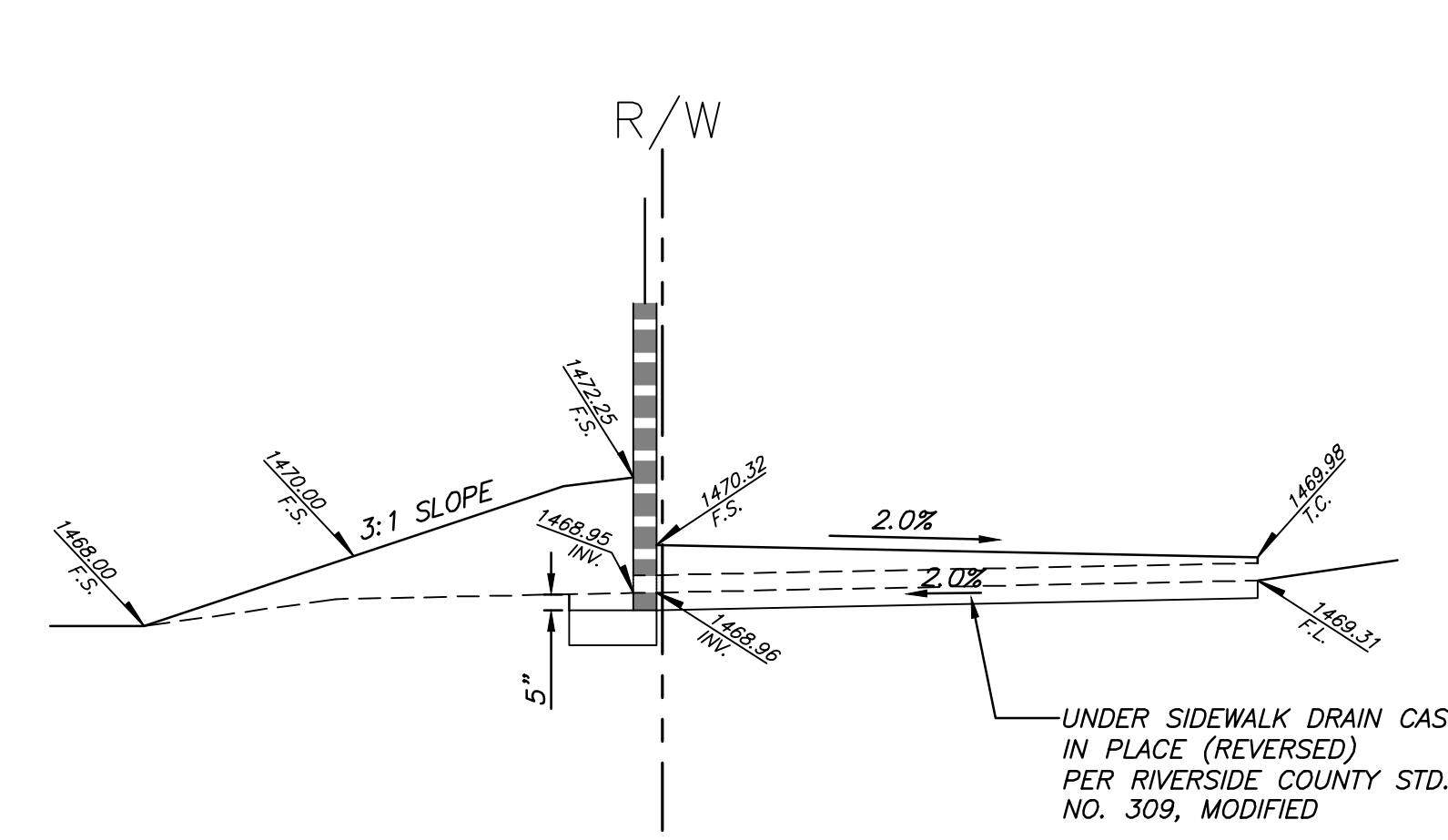
PREPARED: NOVEMBER 2, 2022

PLOT DATE: 11/2/2022
SHEET 1 OF 2

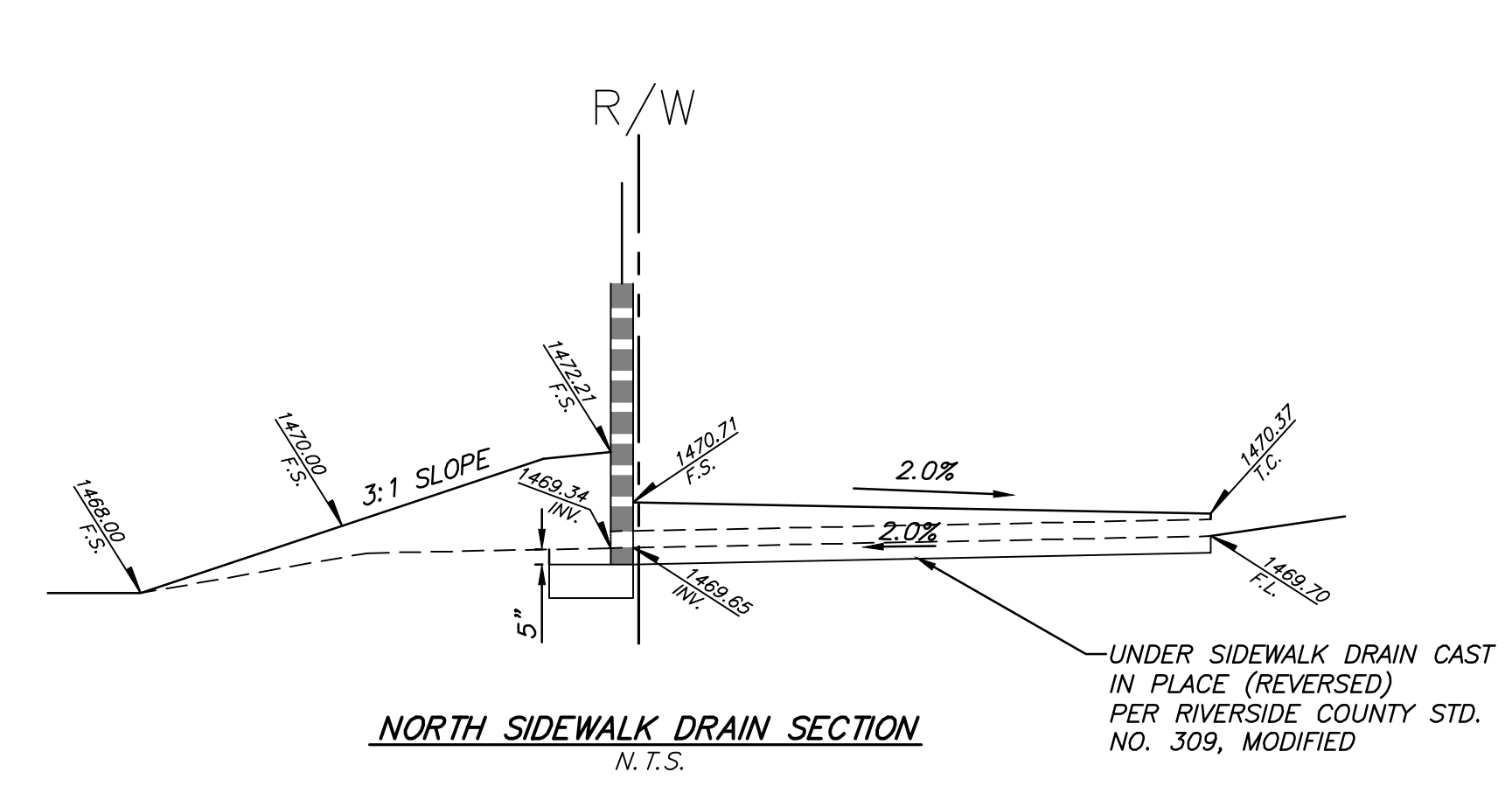
PREPARED BY: **Hazen Design Group, Inc**
360 Twilight Court
Camarillo, CA 93012
Phone (805) 233-7778



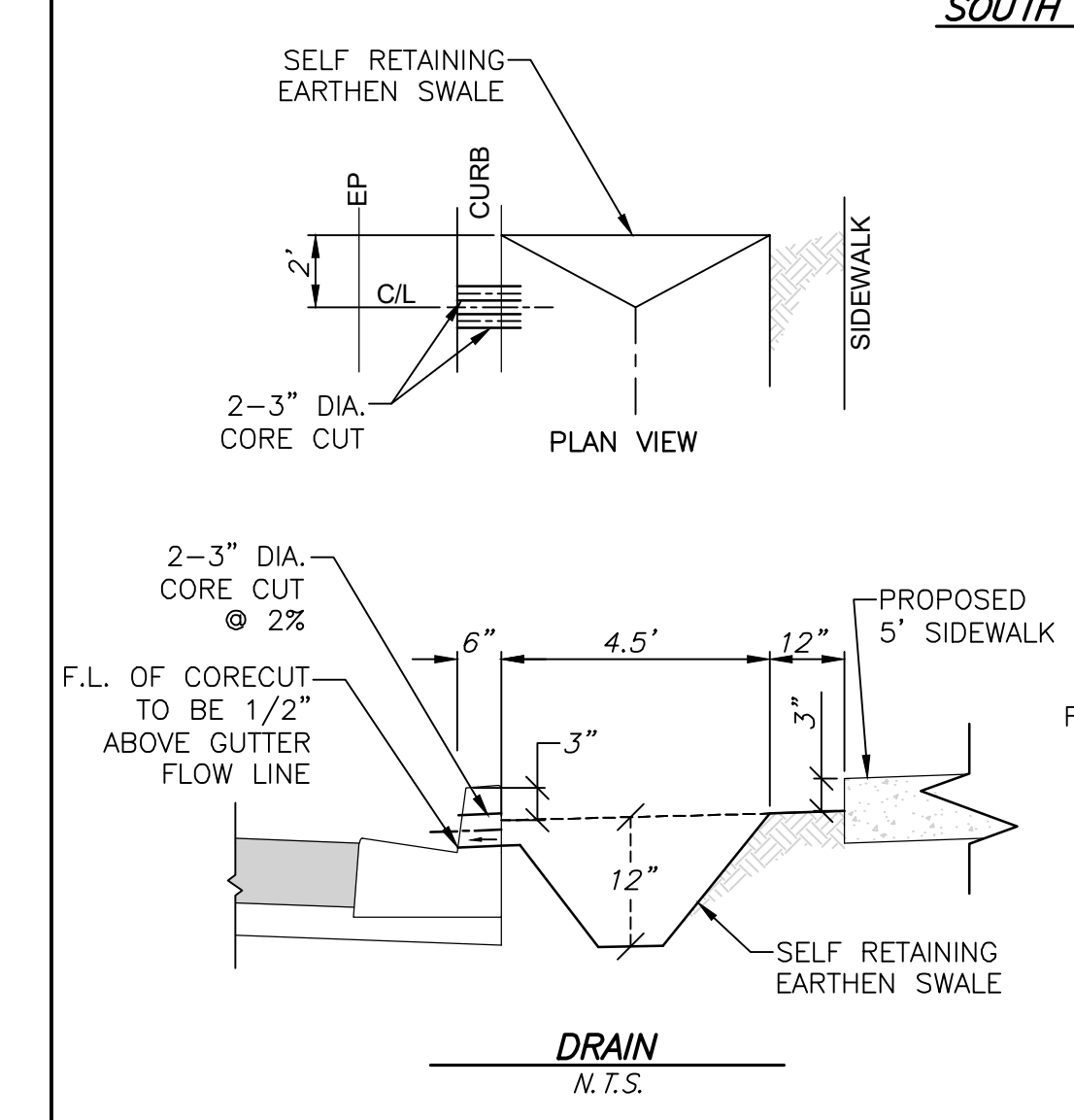
P:\PROJECTS\WINCHESTER RV LOT\13_CONCEPT GRADING PLAN\CONCEPT GRADING PLAN_6.DWG



SOUTH SIDEWALK DRAIN SECTION
N.T.S.

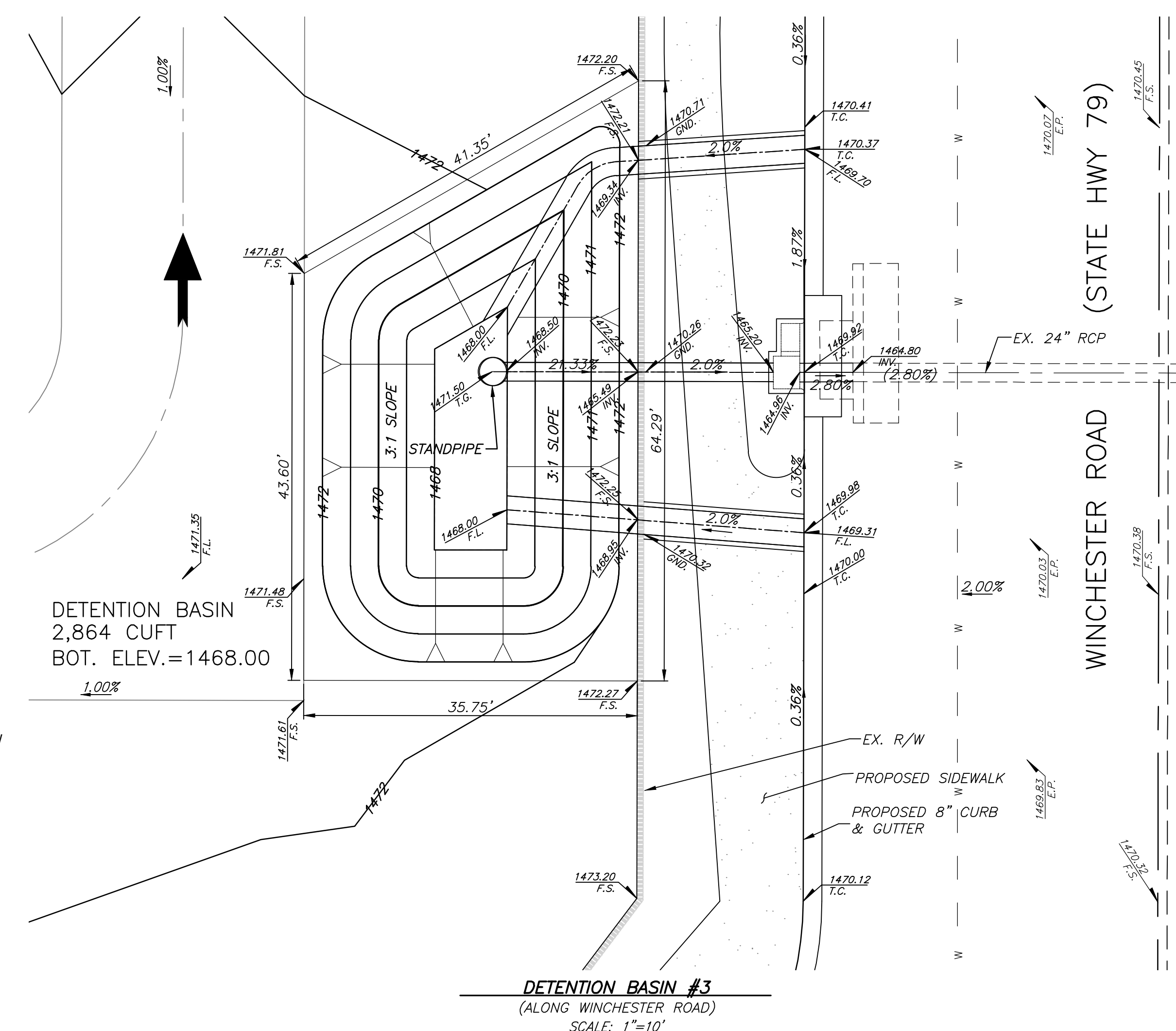


NORTH SIDEWALK DRAIN SECTION
N.T.S.

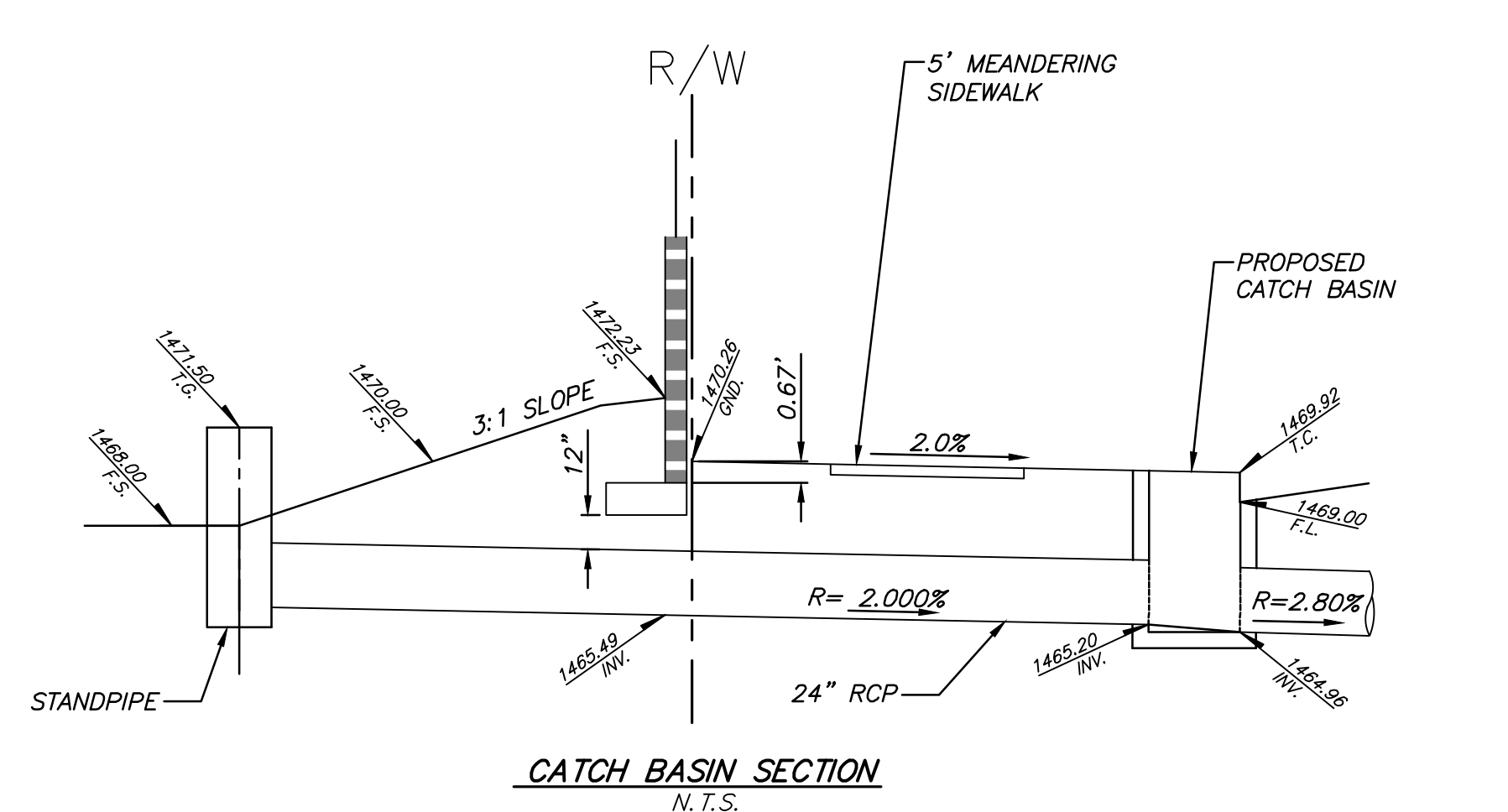


DRAIN
N.T.S.

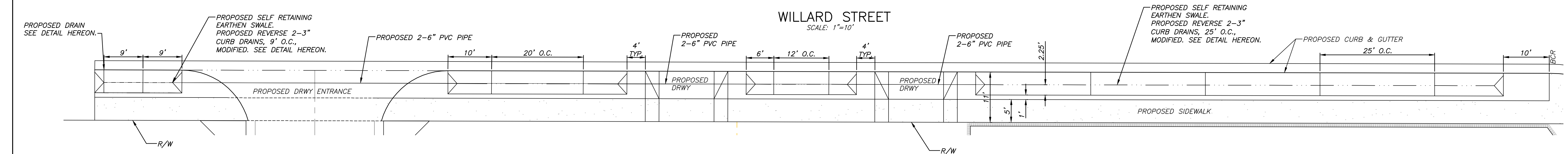
VOLUME CALCULATION:
WILLARD STREET:
(195x1.5)+(110'x2x0.7854)= 465 CU.FT.
HADDOCK STREET:
(263x1.5)= 394 CU.FT.
SELF RETAINING EARTHEN SWALE
(ALONG WILLARD RD. & HADDOCK ST.)
N.T.S.



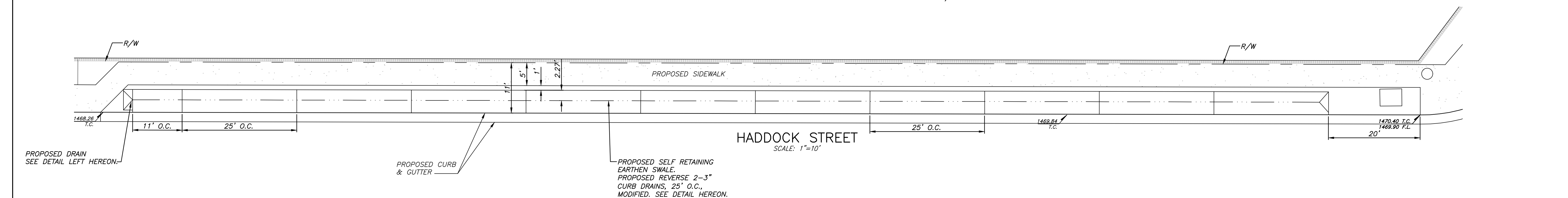
DETENTION BASIN #3
(ALONG WINCHESTER ROAD)
SCALE: 1"=10'



CATCH BASIN SECTION
N.T.S.



WILLARD STREET
SCALE: 1"=10'



HADDOCK STREET
SCALE: 1"=10'

PREPARED BY:
Hzyen Design Group, Inc
360 Twilight Court
Camarillo, CA 93012
Phone (805) 233-7778



EXHIBIT "G"
PREPARED: NOVEMBER 2, 2022

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

INLAND FOUNDATION ENGINEERING, INC.
Consulting Geotechnical Engineers and Geologists
www.inlandfoundation.com

August 20, 2021
Project No. N133-001

No Worries! RV and Boat Storage

28447 Witherspoon Parkway
Valencia, California 91355

Attention: Tom Comber

Subject: Geotechnical Investigation Report
RV and Boat Storage Facility
SWC Willard Street and State Highway 79 (Winchester Road)
Riverside County, California
APN 462-182-018 & 462-185-006


Dear Mr. Comber:

This report presents the results of the geotechnical investigation for the proposed RV and boat storage facility to be constructed southwest of and adjacent to the intersection of Willard Street and State Highway 79 in the Winchester area of Riverside County, California. The investigation was conducted in general conformance with our proposal dated June 16, 2021.

This report includes project design and construction recommendations along with the field and laboratory data. The primary geotechnical issues that will require mitigation is the potential for earthquake soil liquefaction and settlement. There is also a significant amount of undocumented fill soil on site that should be removed and recompacted where pavement and settlement-sensitive structures are planned.

We appreciate the opportunity to be of service to you on this project. Please contact our office if you have any questions.

Respectfully,
INLAND FOUNDATION ENGINEERING, INC.


Daniel R. Lind, P.G., C.E.G.
Vice President


Allen D. Evans, P.E., G.E.
Principal

DRL:ADE:es
Distribution: Addressee

INTRODUCTION

This report presents the findings of the geotechnical investigation conducted for a proposed RV and boat storage facility to be located southwest of and adjacent to the intersection of Willard Street and State Highway 79 in the Winchester area of Riverside County, California. The following references were used for this project:

- Plan entitled “Conditional Use Permit, County of Riverside, No Worries! RV and Boat Storage”, dated April 16, 2021, prepared by Hzayen Design Group, Inc.
- Plan entitled “ALTA/NSPS Land Title Survey for Winchester Road & Willard Street, Winchester, CA 92596”, dated April 5, 2021, prepared by Partner Engineering & Science, Inc.
- Phase 1 Environmental Site Assessment Report, Vacant Land, Southwest Corner of Willard Street and Highway 79, Winchester, California 93596, dated March 31, 2021 prepared by Partner Engineering.

Additional references are appended.

SCOPE OF SERVICE

The purpose of this geotechnical investigation is to provide geotechnical parameters and recommendations for design and construction of the proposed RV and boat storage facility. The scope of service included:

- *Review of the general geologic conditions and specific subsurface conditions of the project site.*
- *Evaluation of the engineering and geologic data collected for the project site.*
- *Preparation of this report with geotechnical conclusions and recommendations for design and construction.*

The tasks performed to achieve these objectives included:

- *Subsurface exploration to evaluate the nature and stratigraphy of the subsurface soil and to obtain representative samples for laboratory testing.*
- *Laboratory testing of representative samples to evaluate the classification and engineering properties of the soil.*

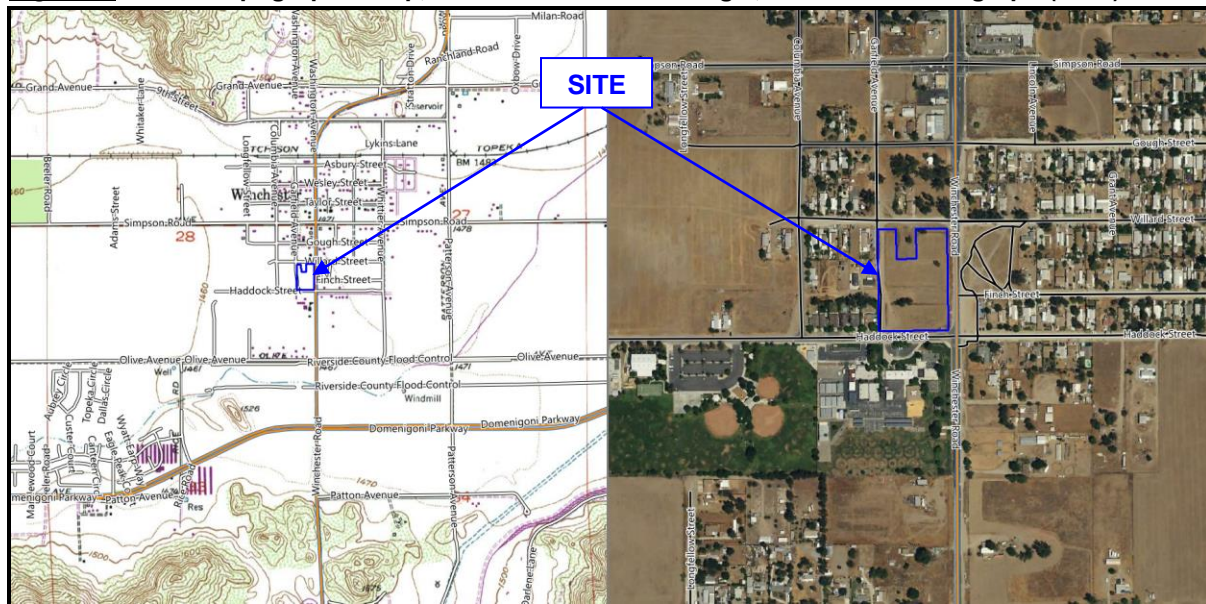
- *Analysis of the data collected and the preparation of this report with our geotechnical conclusions and recommendations.*
- *Infiltration testing.*

Evaluation of hazardous waste was not within the scope of service provided. An evaluation of faulting and/or seismic hazards on the site also was not within the scope of service provided.

PROJECT AND SITE DESCRIPTION

The subject project will consist of development of an RV and boat storage facility. The approximately ± 3.53 acre site is located southwest of and adjacent to the intersection of Willard Street and Highway 79 in the Winchester area of Riverside County, California. The project site lies within the southeasterly portion of Section 28, Township 5 South, Range 2 West, S.B.B.&M. Figure 1 below shows the location of the project site.

Figure 1: USGS Topographic Map, Romoland 7.5' Quadrangle, and Aerial Photograph (2018)



A proposed modular office building and RV detail structure are planned on the northwest portion of the site. The remainder of the site will be developed with parking stalls and paved access driveways. Street improvements along Willard Street, Winchester Road, and Haddock Street, including pavement, curb, gutter, and sidewalk, are also planned.

The site is currently undeveloped. The topography of the site is nearly level, with a slight apparent gradient to the south. The site has been previously graded. Previously graded pads are present on the northerly and southerly portions of the site. A graded extension of Finch Street separates the northerly and southerly graded pads. The graded pad areas on the northerly portion of the site are approximately two (2) to four (4) feet higher than the adjacent ground areas. The graded southerly portion of the site is approximately three (3) to five (5) feet higher than adjacent ground areas. The proposed building areas for the office and RV detail structure do not appear to have been previously graded. Generally, cuts and fills of less than four feet are planned, exclusive of any remedial grading recommended in this report.

Site vegetation consists of several mature trees and seasonal grasses and weeds. The surrounding properties consist of State Highway 79 (Winchester Road) to the east, Willard Street and single-family residences to the north, Haddock Street and Winchester Elementary School to the south, and single-family residences to the west.

According to the referenced Phase I Environmental Site Assessment report, a single-family residence was present on the site from 1901 to 1949. Based on historical aerial photographs, it appears that the residence was located on the easterly portion of the property. Several trees were also formerly present on the property.

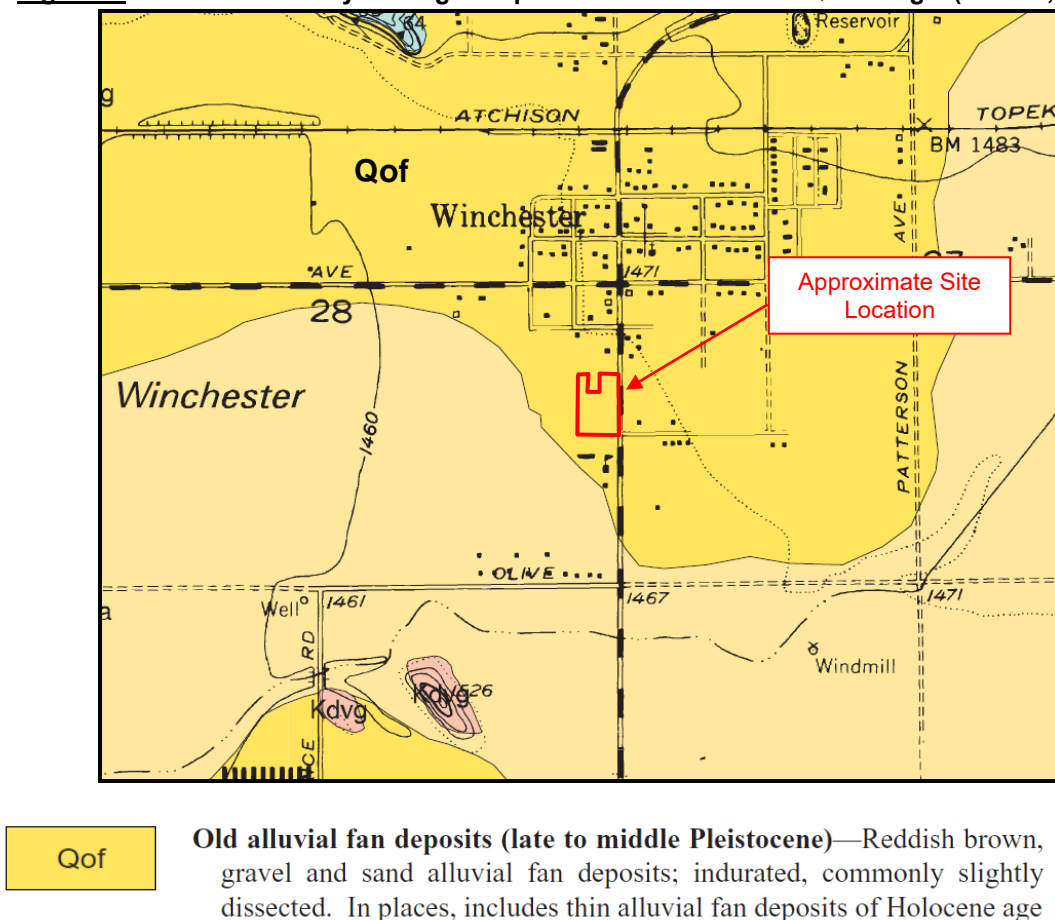
GEOLOGIC SETTING

Regional Geology: The subject site is situated within a natural geomorphic province in southwestern California known as the Peninsular Ranges, which is characterized by steep, elongated ranges and valleys that trend northwesterly. This geomorphic province encompasses an area that extends 125 miles, from the Transverse Ranges and the Los Angeles Basin, south to the Mexican border, and beyond another 795 miles to the tip of Baja California (Norris & Webb, 1990; Harden, 1998). This province is believed to have originated as a thick accumulation of predominantly marine sedimentary and volcanic rocks during the late Paleozoic and early Mesozoic. Following this accumulation, in mid-Cretaceous time, the province underwent a pronounced episode of mountain building. The accumulated rocks were then complexly metamorphosed and intruded by igneous rocks, known locally as the Southern California Batholith. A period of erosion followed the mountain building, and during the late Cretaceous and Cenozoic time, sedimentary and subordinate volcanic rocks were deposited upon the eroded surfaces of the batholithic and pre-batholithic rocks.

Local Geology: More specifically, the site is situated within the Perris Block, an eroded mass of Cretaceous and older crystalline rock. Thin sedimentary and volcanic units mantle the bedrock in a few places with alluvial deposits filling in the lower valley areas. The Perris Block is a structurally stable, internally unfaulted mass of crustal rocks bounded on the west by the Elsinore-Chino fault zones, on the east by the San Jacinto fault zone, and on the north by the Cucamonga fault zone (Woodford, et al., 1971). On the south, the Perris Block is bounded by a series of sedimentary basins that lie between Temecula and Anza (Morton and Matti, 1989).

According to the USGS Preliminary Geologic Map of the Winchester 7.5' Quadrangle (Morton, 2003) the site is underlain by old (late to middle Pleistocene) alluvial fan deposits (map symbol Qof) described as indurated reddish brown gravel and sand alluvial deposits. Figure 2 below shows a portion of the U.S.G.S. Preliminary Geologic Map of the Winchester 7.5' Quadrangle (Morton, 2003), depicting the mapped geologic units in the vicinity of the subject property:

Figure 2: USGS Preliminary Geologic Map of the Winchester 7.5' Quadrangle (Morton, 2003)



Faulting: There are at least 39 major late Quaternary active/potentially active faults within a 100-kilometer radius of the site. Of these, there are no faults known to traverse the site, based on published literature, nor any photogeologic or surficial geomorphic evidence suggestive of faulting. In addition, the site is not located within a State of California "Alquist-Priolo Earthquake Fault Zone" for fault rupture hazard (CGS, 2018). Current mapping by the Riverside County Land Information System indicates that the site does not lie within a mapped County fault zone.

The nearest known active fault is the Casa Loma Fault (southern branch of the San Jacinto Fault). The Casa Loma Fault is located approximately 12.4 kilometers to the northeast of the project site. The San Jacinto Fault (San Jacinto Valley Segment, U.S.G.S., 2008) is a right-lateral, strike-slip fault, approximately 43 kilometers in length, with an estimated maximum moment magnitude (M_w) earthquake of M_w 7.0 and an associated slip-rate of 18 mm/year.

The site and surrounding area have been subject to strong ground shaking related to active faults that traverse the region. The approximate distances to the faults and published maximum earthquake magnitudes are shown in Table 1:

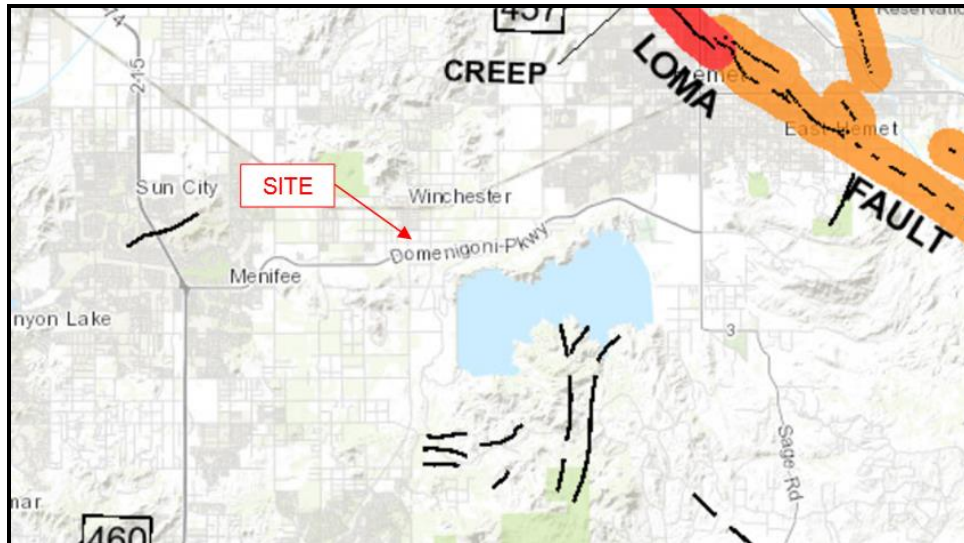
Table 1: Fault Zone, Distances and Maximum Earthquake Magnitudes

Fault Zone	Approximate Distance (Km)	Earthquake Magnitude (M_w)
San Jacinto - San Jacinto Valley	12.4	7.0
San Jacinto - Anza	14.9	7.2
Elsinore - Temecula	19.6	6.8
Elsinore - Glen Ivy	20.1	6.8

For seismic design purposes, based on published parameters for faults in California from the *Working Group on Earthquake Probabilities* (Field and others, 2008; Willis and others, 2008), we are considering that a cascading effect of rupture will occur along the entire length of all the San Jacinto Fault Zone segments. Based on published rupture-model data (Petersen et al., 2008), the total rupture area of these combined faults is 4,017 square kilometers, with an associated Maximum Moment Magnitude (M_w) of 7.8.

Figure 3 is a portion of the CGS 2010 Fault Activity Map of California showing the location of the site and mapped earthquake fault zones in the vicinity of the site.

Figure 3: 2010 Fault Activity Map of California, CGS, 2010



Our review of the potential for surface fault rupture at this site has included an examination of non-stereo and stereo pairs of vertical black and white aerial photographs dating between the years of 1962 and 2018 (see References for a listing). The photogeologic analysis did not reveal observed indicators suggestive of active fault-related features. This included the lack of photolineations and/or no consistent tonal variations observed across the site, or trending toward the site. Our review indicates that no documented active faults are known to traverse toward the subject site, based on published literature, and no surficial indications or geomorphic features were observed within the aerial photographs or field reconnaissance that are suggestive of active faulting.

Ground rupture is generally considered most likely to occur along pre-existing faults. Based on our review of published geologic maps, aerial photograph review, and site reconnaissance, the potential for ground rupture at the site is considered to be low.

Seismic Parameters: The approximate site coordinates (WGS 84) are 33.7042°N / -117.0855°W. The computer program U.S. Seismic Design Maps website (OSHPD, 2021) was used to evaluate the seismic parameters for this project. Table 2 summarizes design criteria obtained from the 2019 California Building Code (CBC), which is based on ASCE 7-16. The values presented in Table 2 are for the risk-targeted maximum considered earthquake (MCE_R).

Table 2: 2019 CBC Seismic Design Parameters

Seismic Parameter	Value
S_s - MCE _R Ground Motion for 0.2-sec Period	1.471
S₁ - MCE _R Ground Motion for 1-sec Period	0.552
SD_s - Numeric Seismic Design Value at 0.2-sec period	1.766
SD₁ - Numeric Seismic Design Value at 1.0-sec period	Null
PGA - MCE _g Peak Ground Acceleration	0.5
F_{PGA} - Site Amplification Factor at PGA	1.2
PGA_M - Site Modified Peak Ground Acceleration	0.6
SITE CLASS	D (Default)

The seismic design parameters recommended above should be discussed with the project structural engineer, as they may significantly impact the structural design of the project. A site-specific ground motion analysis may result in less conservative seismic design parameters than reported above.

Groundwater: The site is located within the Winchester hydrologic sub-area of the Santa Ana hydrologic basin in southwestern Riverside County, California. The Winchester subbasin includes a relatively level alluvial valley floor and is bounded by granitic and undifferentiated metamorphic rocks. Alluvium-filled constrictions are boundaries between the Winchester subbasin and the Perris-South subbasin to the northwest, the Menifee subbasin to the southwest, and the Hemet subbasin to the east. Saturated alluvium that fills the constrictions connects the subbasins hydrologically in the subsurface. Alluvium in the Winchester subbasin is estimated to be as much as 500 to 900 ft. thick (Kaehler & Belitz, 2003).

Groundwater data compiled by the California Department of Water Resources (DWR) reveals that there are several wells in the vicinity of the project. State Well No. 05S02W27N001S, located approximately 1,600 feet to the southeast of the site, was monitored on June 16, 1994. At that time, the depth to groundwater was 8.6 feet. State Well No. 05S02W33C001S, located approximately 2,700 feet to the southwest of the site was monitored on May 16, 1995. At that time, the depth to groundwater was 8.2 feet.

According to a report entitled “Ground Water in the San Jacinto and Temecula Basins, California”, dated 1919 and prepared by Gerald A. Waring, the approximate depth to groundwater beneath the site in 1915 was 10 feet (based on groundwater elevation contours).

Groundwater was encountered within exploratory borings B-01 and B-02 at depths of approximately 15 and 13 feet below the existing ground surface, respectively. Based on the encountered groundwater levels and historical groundwater data reviewed, we estimate a high groundwater level at the site of ten (10) feet bgs for purposes of our analysis.

Secondary Seismic Hazards: The primary geologic hazard affecting the project is ground shaking. Secondary permanent or transient seismic hazards generally associated with severe ground shaking during an earthquake include, but are not necessarily limited to; ground rupture, liquefaction, seiches or tsunamis, landsliding, rockfalls, and debris flow. These are discussed below:

Ground Rupture - Ground rupture is generally considered most likely to occur along pre-existing faults. Since no active faults are known to traverse the site, the probability of ground rupture is low.

Liquefaction and Seismically-Induced Settlement: The project site is located within an area mapped by Riverside County to have a “high” liquefaction potential. In general, liquefaction is a phenomenon that occurs where there is a loss of strength or stiffness in the soil that can result in the settlement of buildings, ground failure, or other hazards. The main factors contributing to this phenomenon are: 1) loose, granular soil (usually of Holocene age); 2) shallow groundwater (generally less than 50 feet); and 3) moderate to high seismic ground shaking.

We analyzed the soil profile logged for exploratory boring B-01. The results of our analysis indicate significant liquefaction potential within the soil profile to a depth of 48 feet bgs. The potential seismically-induced settlement within the soil profile is approximately 6 inches. The estimated differential settlement due to a seismic event is approximately 3 inches in 30 feet horizontal. A discussion of the liquefaction and seismic settlement analysis, with graphic and tabulated results, is included in Appendix C.

Seiches/Tsunamis: A seiche is a standing wave in an enclosed or partially enclosed body of water. In order for a seiche to form, the body of water needs to be at least partially bounded, allowing the formation of the standing wave. Tsunamis are very large ocean waves that are caused by an underwater earth-quake or volcanic eruption, often causing extreme destruction when they strike land.

There are no bodies of water on or adjacent to the project site. Based on the distance to large, open bodies of water and the elevation of the site with respect to sea level, it is

our opinion that the potential of seiches/tsunamis does not present a hazard to this project.

Landsliding - Due to the low-lying relief of the site and adjacent areas, landsliding due to seismic shaking is considered nil.

Rockfalls - Since no large rock outcrops are present at or adjacent to the site, the possibility of rockfalls during seismic shaking is nil.

Debris Flows: Debris flows are composed of a slurry-like mass of liquefied debris (ranging up to boulder size) that moves downhill under the force of gravity. Such slurries are dense enough to support very large particles but not solid enough to resist flowing downhill. Debris flows are most common in steep mountain canyons when a mass of mud and debris becomes saturated during a heavy rainstorm and suddenly begins to flow down the canyons (Prothero & Schwab, 1996). Based on the location of the site and the relatively planar topography of the property up-gradient of the site, it is our opinion that the hazard of debris flow should be considered low.

Other Geologic Hazards: There are other geologic hazards not necessarily associated with seismic activity that occur statewide. These hazards include, but are not limited to, methane gas, hydrogen-sulfide gas, tar seeps, Radon-222 gas, and naturally occurring asbestos. Of these hazards, there are none that appear to impact the site.

SUBSURFACE CONDITIONS

Subsurface exploration at the site consisted of nine (9) exploratory borings to depths ranging from approximately 5.5 to 56.5 feet below existing site grades. The field exploration is described in Appendix A. Boring locations are shown on Figure A-12. The soil encountered in the borings generally consisted of alluvial deposits of interbedded layers of silty clayey sand (SC-SM), clayey sand (SC), silty sand (SM), sandy silty clay (CL-ML), and sandy silt (ML). Undocumented artificial fill materials were encountered within exploratory borings B-03, B-04, B-05, B-07 and B-08 to depths ranging from approximately 4.5 to 6 feet below the existing ground surface. The fill generally consists of fine- silty clayey sand (SC-SM), and clayey sand (SC). Areas of deeper artificial fill and debris may be present on other portions of the site.

Groundwater was encountered within exploratory borings B-01 and B-02 at depths of approximately 15 and 13 feet bgs, respectively. Historic high groundwater levels are as shallow as 10 feet bgs.

Analytical testing indicates the concentration of sulfates is 34 ppm, which is negligible with respect to sulfate attack on concrete. The chloride concentration in the tested samples was 31 parts per million (ppm), indicating the soil is not corrosive to ferrous metal. The soil is alkaline with a pH value of 8.3. The minimum saturated resistivity value of 3,330 ohm-cm indicates the soil is moderately corrosive to buried metal. IFE does not practice corrosion engineering. If further information is desired concerning the site corrosion characteristics, a competent corrosion engineer should be consulted.

Expansion index (EI) testing indicates the site soil has a very low expansion potential. Design measures to mitigate the effects of expansive soil are not necessary.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of our field and laboratory investigation, the proposed construction is feasible from a geotechnical engineering standpoint. The primary issues requiring mitigation are the potential for earthquake soil liquefaction and the presence of undocumented artificial fill material to depths of approximately five to six feet across the site. The following sections present our geotechnical recommendations for project design and construction.

Foundation Design: Footings for the proposed modular office building, RV detail structure and other appurtenant structures should be designed with a maximum allowable bearing pressure of 1,700 pounds per square foot (psf). Footings should have a minimum width of 12 inches and be founded a minimum depth of 12 inches below the lowest adjacent grade. The allowable bearing pressure may be increased by 900 psf for each additional foot of depth and by 300 psf for each additional foot of width, to a maximum allowable bearing pressure of 3,000 psf. The allowable bearing capacity may also be increased by $\frac{1}{3}$ for short-term transient wind and seismic loads.

Static settlement of footings designed and constructed as recommended herein is expected to be less than one inch. Differential settlement between footings of similar size and load is expected to be less than one-half inch. Potential seismic site settlement was analyzed to be approximately 6 inches. Recommendations to mitigate seismically-induced settlement are presented in the “General Site Grading” section of this report.

Lateral Resistance: Resistance to lateral loads will be provided by a combination of friction acting at the base of the slab or foundation and passive earth pressure. A coefficient of friction of 0.40 between soil and concrete may be used with dead load forces only. A passive earth pressure of 230 psf, per foot of depth, may be used for the sides of footings poured against recompacted or suitably dense native material.

Passive earth pressure should be ignored within the upper one foot except where confined as beneath a floor slab, for example. These values may be increased by $\frac{1}{3}$ to provide for lateral loads of short duration such as those caused by wind or seismic forces.

Lateral Earth Pressure: Retaining walls that are backfilled with native on-site soil should be designed for an active earth pressure equivalent to that exerted by a fluid weighing not less than 45 pcf. Any applicable construction or seismic surcharges should be added to this pressure.

Trench Wall Stability: All excavations should be configured per with the requirements of CalOSHA for Type C soil. During construction, the classification of the soil and the shoring and/or slope configuration should be the responsibility of the contractor on the basis of the trench depth and the soil encountered. The contractor should have a “competent person” on-site for the purpose of assuring safety within and about all construction excavations.

Concrete Slabs-on-Grade: Concrete slabs-on-grade should have a minimum thickness of four inches. During final grading and prior to the placement of concrete, all surfaces to receive concrete slabs-on-grade should be compacted to maintain a minimum compacted fill thickness of 12 inches. Load bearing slabs should be designed using a modulus of subgrade reaction not exceeding 100 pounds per square inch per inch.

Slabs should be designed and constructed in accordance with the provisions of the American Concrete Institute (ACI). Shrinkage of concrete should be anticipated and will result in cracks in all concrete slabs-on-grade. Shrinkage cracks may be directed to saw-cut "control joints" spaced on the basis of slab thickness and reinforcement. ACI typically recommend control joint spacings in unreinforced concrete at maximum intervals equal to the slab thickness times 24.

Slabs to receive moisture-sensitive coverings should be provided with a moisture vapor retarder/barrier designed and constructed according to the American Concrete Institute 302.1 R, Concrete Floor and Slab Construction, which addresses moisture vapor retarder/barrier construction. At a minimum, the vapor retarder/barrier should comply with ASTM E1745 and have a nominal thickness of at least 10 mils. The vapor retarder/barrier should be properly sealed, per the manufacturer’s recommendations, and protected from punctures and other damage.

Preliminary Flexible Pavement Design: Recommended structural pavement sections are shown below in Table 3. The recommended sections are based on a design R-value of 44, current Caltrans design procedures and the traffic index (T.I.) values shown.

Table 3: Preliminary AC Pavement Sections

Service	Asphalt Concrete Thickness (ft.)	Base Course Thickness (ft.)
Light traffic (autos, parking areas, T.I. = 5.0)	0.20	0.35
Local streets (Willard St. Haddock St, T.I. = 5.5)	0.25	0.40
Heavy traffic (trucks, driveways, T.I. =7.0)	0.30	0.55

At the completion of rough grading, pavement subgrade soil should be evaluated, with possible additional R-value testing, to confirm that the recommended pavement sections are suitable.

Inland Foundation Engineering, Inc. does not practice traffic engineering. The TI values used to develop the recommended pavement sections are typical for projects of this type. The project civil engineer or traffic engineer should review the TI's to verify that they are appropriate for this project.

Infiltration: Infiltration testing was performed in the vicinity of the proposed retention basin in the southeastern portion of the site. The testing procedures and test results are described in Appendix C. Table 4 below provides a summary of the test data with values for I_c . Note that the values shown do not include safety factors.

Table 4: Percolation Test Data and Infiltration Rates

Percolation Hole No.	Percolation Rate (Min./Inch)	Depth Below Existing Ground Surface (In.)	Infiltration Rate (I_c) (In./Hr.)
P-1	30	48	0.2
P-2	60	48	0.1

General Site Grading: All grading should be performed per the applicable provisions of the 2019 California Building Code. The following recommendations have been developed on the basis of our field and laboratory testing:

- 1. Clearing and Grubbing:** All building and pavement areas and all surfaces to receive compacted fill should be cleared of vegetation, debris, and other unsuitable materials. All such material should be disposed of off-site.

All undocumented fill and loose alluvial soil encountered during site grading should be completely removed. Such material is suitable for replacement as compacted fill as recommended herein. Undocumented artificial fill materials were encountered within exploratory borings B-03, B-04, B-05, B-07 and B-08 to depths ranging from approximately 4.5 to 6 feet below the existing ground surface. Undocumented fill may be present at other locations and depths on the site and may be encountered during site grading.

Any abandoned underground utility lines should be traced out and completely removed from the site. Any abandoned septic systems, including septic tanks, seepage pits and or leachlines, should be removed and backfilled in accordance with these recommendations.

- 2. Preparation of Surfaces to Receive Compacted Fill:** All surfaces to receive compacted fill should be evaluated by a representative of this firm. Depending on the observed condition, compaction testing of the unprocessed native soil may be necessary. If roots, deleterious material or other unsuitable conditions are encountered, additional overexcavation may be required. Upon approval, surfaces to receive fill should be scarified, brought to near optimum moisture content, and compacted to a minimum of 90 percent relative compaction.
- 3. Placement of Compacted Fill:** Fill materials consisting of on-site soil or approved imported granular soil should be spread in shallow lifts and compacted at near optimum moisture content to a minimum of 90 percent relative compaction, based on ASTM D1557.
- 4. Preparation of Building Area:** The building area for the proposed modular office building and RV detail structure should be over-excavated to a depth of at least five (3) feet below finish grade or two (2) feet below the bottom of the deepest footings, whichever is greater. Over-excavation should extend laterally for at least five (5) feet outside of exterior building foundation lines. The excavation bottom should be approved as recommended above.

To mitigate potential structural damage associated with seismically induced settlement, the building area should be supported by a layered system of compacted fill and Tensar® TX7 geogrid, or equivalent. Two (2) geogrid layers should be placed within the compacted building pad at vertical intervals of 12 inches. The bottom layer of geogrid reinforcement should be placed directly on the prepared excavation bottom. Care should be taken during fill placement and compaction not to damage the geogrid. The geogrid supplier/manufacturer should review the final design and provide specific installation recommendations.

- 5. Preparation of Slab and Paving Areas:** During final grading and immediately prior to the placement of concrete or a base course, all surfaces to receive asphalt concrete paving or concrete slabs-on-grade should be processed and tested to assure compaction for a depth of at least of 12 inches. This may be accomplished by a combination of over-excavation, scarification and recompaction of the surface, and replacement of the excavated material as controlled compacted fill. Compaction of slab areas should be to a minimum of 90 percent relative compaction. Compaction within proposed pavement areas should be to a minimum of 95 percent relative compaction for both the subgrade and base course.
- 6. Utility Trench Backfill:** Utility trench backfill consisting of the on-site soil types should be placed by mechanical compaction to a minimum of 90 percent relative compaction. This is with the exception of the upper 12 inches under pavement areas where the minimum relative compaction should be 95 percent. Jetting of the native soils is not recommended.
- 7. Testing and Observation:** During grading tests and observations should be performed by a representative of this firm to verify that the grading is performed per the project specifications. Field density testing should be performed per the current ASTM D1556 or ASTM D6938 test methods. The minimum acceptable degree of compaction should be 90 percent of the maximum dry density, based on ASTM D1557, except where superseded by more stringent requirements, such as beneath pavement. Where testing indicates insufficient density, additional compactive effort should be applied until retesting indicates satisfactory compaction.

GENERAL

The findings and recommendations presented in this report are based upon the soil conditions encountered at an accessible location adjacent to the proposed structure. Should conditions be encountered during grading that appear to be different than those indicated by this report, this office should be notified.

This report was prepared prior to the preparation of a grading plan for the project. We recommend that a pre-job conference be held on the site prior to the initiation of site grading. The purpose of this meeting will be to assure a complete understanding of the recommendations presented in this report as they apply to the actual grading performed.

This report was prepared for No Worries! RV and Boat Storage for their use in the design of the proposed cultivation and processing facility as described herein. This report may only be used by No Worries! RV and Boat Storage for this purpose. The use of this report by parties or for other purposes is not authorized without written permission by Inland Foundation Engineering, Inc. Inland Foundation Engineering, Inc. will not be liable for any projects connected with the unauthorized use of this report.

The recommendations of this report are considered to be preliminary. The final design parameters may only be determined or confirmed at the completion of site grading on the basis of observations made during the site grading operation. To this extent, this report is not considered to be complete until the completion of both the design process and the site preparation.

LIMITATIONS

The findings and recommendations of this report are based upon an interpolation of soil conditions between test locations. It is possible that conditions may be encountered that are different than those indicated in this report. Should such conditions be encountered during construction, our office should be notified in order to determine if revisions or retesting are warranted.

Evaluation of hazardous waste was not within the scope of services provided. The information in this report represents professional opinions that have been developed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice included in this report.

REFERENCES

ASCE/SEI, 2017, ASCE Standard 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

Blake, T.F. 1989-2000a, EQSEARCH, A Computer Program for the Estimation of Peak Horizontal Acceleration from Southern California Historical Earthquake Catalog, Version 3.00b.

California Building Standards Commission, 2019, California Building Code (CBC), California Code of Regulations, Title 24, Part 2, Volume 2.

California Geological Survey (CGS), 2008, Guidelines for Evaluating and Mitigating Seismic Hazards in California, CGS Special Publication 117A.

California Geological Survey (CGS), 2010, 2010 Fault Activity Map of California, Geologic Map No. 6.

California State Water Resources Control Board, Geotracker website, <https://geotracker.waterboards.ca.gov/>

Harden, D.R., 1998, California Geology: Prentice Hall, Inc.

Jennings, C.W., 1994, Fault Activity Map of California and Adjacent Areas, C.D.M.G. Geologic Data Map No. 6, 1:750,000 scale.

Kaeler, C.A., and Belitz, K., 2003, Tracing Reclaimed Water in the Menifee, Winchester, and Perris South Ground-Water Subbasins, Riverside County, California, USGS Water Resources Investigations Report, 03-4039.

Larson, R., and Slosson, J., 1992, The Role of Seismic Hazard Evaluation in Engineering Reports, *in* Engineering Geology Practice in Southern California, AEG Special Publication No. 4, pp. 191-194.

Lancaster, et al., 2012, CGS Preliminary Geologic Map of Quaternary Deposits, Palm Springs 30 x 60' Quadrangle.

Larson, R., and Slosson, J., 1992, The Role of Seismic Hazard Evaluation in Engineering Reports, *in* Engineering Geology Practice in Southern California, AEG Special Publication No. 4, pp. 191-194.

Morton, D.M., 2013, Preliminary Geologic Map of the Winchester 7.5' Quadrangle, U.S.G.S. Open File Report 03-188.

Norris, R.M. and R.W. Webb, 1990, Geology of California (second edition).

Peterson, et al., 2008, Documentation for the 2008 Update of the United States National Seismic Hazard Maps, USGS Open File Report 2008-1128.

Prothero, D.R., & Schwab, F., 1996, Sedimentary Geology, an Introduction to Sedimentary Rocks and Stratigraphy.

OSHPD, 2021, U.S. Seismic Design Maps, <https://seismicmaps.org/>

Riverside County Land Information System GIS Maps, 2021.

Tensor, Information Bulletin IB/Earthquake_Foundation, 2013.

Waring, G.A., 1919, Ground Water in the San Jacinto and Temecula Basins, California, USGS Water-Supply Paper 429.

Watermaster Support Services, 2019, Cooperative Well Measurement Program, Fall 2019.

AERIAL PHOTOGRAPHS UTILIZED

Riverside County Flood Control District, 1962, Photo Nos. 3-368 and 3-369, Scale 1" = 2,000', January 29, 1962.

Riverside County Flood Control District, 1974, Photo Nos. 589 and 590, Scale 1" = 2,000', June 20, 1974.

Riverside County Flood Control District, 1980, Photo Nos. 627 and 628, Scale 1" = 2,000', April 15, 1980.

Riverside County Flood Control District, 1990, Photo Nos. 12-27 and 12-28, Scale 1" = 2,000', January 25, 1990.

Riverside County Flood Control District, 1995, Photo Nos. 12-28 and 12-29, Scale 1" = 1,600', January 30, 1995.

Riverside County Flood Control District, 2000, Photo Nos. 12-28 and 12-29, Scale 1" = 1,600', March 18, 2000.

Riverside County Flood Control District, 2005, Photo Nos. 12-26 and 12-27, Scale 1" = 1,600', July 27, 2005.

Riverside County Flood Control District, 2010, Photo Nos. 12-27 and 12-28, Scale 1" = 1,600', March 29, 2010.

Terrain Navigator, Orthophoto Map, Winchester Quadrangle, CA, USGS Ref. Code 33117-F1-TF-012, dated 2018.





















***APPENDIX A –
Field Exploration***

APPENDIX A FIELD EXPLORATION

Field exploration consisted of nine exploratory borings with a truck-mounted drill rig at the approximate locations shown on Figure A-12. Logs of the materials encountered were recorded during drilling by a staff geologist and are presented on Figures A-3 through A-11.

Representative soil samples were obtained within the borings by driving a thin-walled steel penetration sampler with successive 30-inch drops of a 140-pound hammer. The numbers of blows required to achieve each six inches of penetration were recorded on the boring logs. Two different samplers were used; a Standard Penetration Test (SPT) sampler and a modified California sampler with brass sample rings. Representative bulk soil samples were also obtained from the auger cuttings. Samples were placed in moisture sealed containers and transported to our laboratory for further testing and evaluation. Laboratory tests results are discussed and included in Appendix B.

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487)

PRIMARY DIVISIONS		GROUP SYMBOLS		SECONDARY DIVISIONS		
COARSE GRAINED SOILS MORE THAN HALF OF MATERIALS IS LARGER THAN #200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN #4 SIEVE	CLEAN GRAVELS (LESS THAN) 5% FINES	GW		WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
		GRAVEL WITH FINES	GP		POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
		SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN #4 SIEVE	CLEAN SANDS (LESS THAN) 5% FINES	SW		WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SANDS WITH FINES	SC		CLAYEY SANDS, SAND-CLAY MIXTURES
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN #4 SIEVE	GRAVELS WITH FINES	GM		SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	
			GC		CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
		SANDS WITH FINES	SM		SILTY SANDS, SAND-SILT MIXTURES	
			SP		POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES	
		FINE GRAINED SOILS MORE THAN HALF OF MATERIALS IS SMALLER THAN #200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT IS LESS THAN 50	ML		INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS
				CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
OL				ORGANIC SILTS AND ORGANIC SILT-CLAYS OF LOW PLASTICITY		
SILTS AND CLAYS LIQUID LIMIT IS GREATER THAN 50	MH			INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS		
	CH			INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS		
	OH			ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS		
HIGHLY ORGANIC SOILS		PT		PEAT, MUCK AND OTHER HIGHLY ORGANIC SOILS		
TYPICAL FORMATIONAL MATERIALS	SANDSTONES		SS			
	SILTSTONES		SH			
	CLAYSTONES		CS			
	LIMESTONES		LS			
	SHALE		SL			

CONSISTENCY CRITERIA BASES ON FIELD TESTS

RELATIVE DENSITY – COARSE – GRAIN SOIL			CONSISTENCY – FINE-GRAIN SOIL		TORVANE	POCKET ** PENETROMETER	* NUMBER OF BLOWS OF 140 POUND HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1 3/8 INCH I.D.) SPLIT BARREL SAMPLER (ASTM -1586 STANDARD PENETRATION TEST) ** UNCONFINED COMPRESSIVE STRENGTH IN TONS/SQ.FT. READ FROM POCKET PENETROMETER
RELATIVE DENSITY	SPT* (# BLOWS/FT)	RELATIVE DENSITY (%)	CONSISTENCY	SPT* (# BLOWS/FT)	UNDRAINED SHEAR STRENGTH (tsf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	
VERY LOOSE	<4	0-15	Very Soft	<2	<0.13	<0.25	
LOOSE	4-10	15-35	Soft	2-4	0.13-0.25	0.25-0.5	
MEDIUM DENSE	10-30	35-65	Medium Stiff	4-8	0.25-0.5	0.5-1.0	
DENSE	30-50	65-85	Stiff	8-15	0.5-1.0	1.0-2.0	
VERY DENSE	>50	85-100	Very Stiff	15-30	1.0-2.0	2.0-4.0	
			Hard	>30	>2.0	>4.0	

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
DRY	Absence of moisture, dusty, dry to the touch
MOIST	Damp but no visible water
WET	Visible free water, usually soil is below water table

CEMENTATION

DESCRIPTION	FIELD TEST
Weakly	Crumbled or breaks with handling or slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

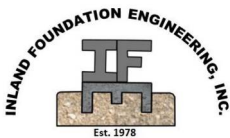
EXPLANATION OF LOGS

LOG OF BORING B-01

DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
			<p>This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.</p>						
5	SC		CLAYEY SAND , fine- to medium, dark grayish-brown (10YR 4/2), slightly moist to moist, dense.		X	AU	17	9	128
			CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), moist, dense, with thin interbeds of sandy clay.		X	SS	25		
					X	AU	13	10	129
					X	SS	19		
10	SM		SILTY SAND , fine- to medium, dark grayish-brown (10YR 4/2), moist, medium dense.		X	AU	7	7	113
					X	SS	9		
					X	AU	6	16	121
					X	SS	10		
15	SC		CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), moist to very moist, medium dense.		X	AU			
					X	SS	5	22	111
					X	SS	10		
20	CL-ML		SANDY SILTY CLAY , light yellowish-brown (2.5Y 6/3), wet, soft.		X	AU			
					X	SPT	1	39	
					X	SPT	2		
25	SC		CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), moist to very wet, loose to medium dense.		X	SPT	1	23	
					X	SPT	3		
30	SC				X	SPT	5	19	
					X	SPT	10		
35	SM		SILTY SAND , fine- to very coarse, dark grayish-brown (10YR 4/2), wet, medium dense.		X	SPT	12	15	
					X	SPT	12		
40	SC		CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), wet, medium dense.		X	SPT	6	23	
					X	SPT	10		
45	ML				X	SPT	6	18	
					X	SPT	10		
50	SC-SM		SANDY SILT , very fine- to fine, dark grayish-brown (10YR 4/2), wet, stiff.		X	SPT	6	18	
			SILTY, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), wet, medium dense.		X	SPT	24	17	
			End of boring at 51.5 feet. Groundwater encountered at 14.75 feet. Backfilled with native soils.		X	SPT	25		

IFE BORING - GINT STD US LAB.GDT - 8/20/21 17:02 - P:\N133001 SWC WILLARD ST.GINT.GPJ



Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u>
	<u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

FIGURE NO.

LOG OF BORING B-02

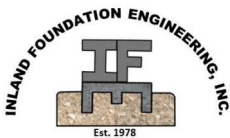
DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

SUMMARY OF SUBSURFACE CONDITIONS

This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	DESCRIPTION	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
	SM	[Dotted Pattern]	SILTY SAND , with trace clay, very fine- to fine, dark grayish-brown (2.5Y 3/2), slightly moist, medium dense to dense.						
5	SC	[Diagonal Hatching]	CLAYEY SAND , very fine- to fine, dark grayish-brown (2.5Y 3/2), moist, medium dense to dense.	X	X	SS	16 21	11	128
	SM	[Dotted Pattern]	SILTY SAND , with trace clay, fine- to coarse, dark grayish-brown (10YR 4/2), moist, medium dense, with thin interbeds of sand.		X	SS	7 11	13	119
10	SM	[Dotted Pattern]	SILTY SAND , fine- to medium, dark grayish-brown (10YR 4/2), moist, medium dense.		X	SS	8 9	20	105
	CL-ML	[Cross-hatching]	SILTY SAND , fine- to medium, dark grayish-brown (10YR 4/2), moist, medium dense.						
	SC	[Diagonal Hatching]	CLAYEY SAND , fine- to medium, dark grayish-brown (10YR 4/2), very moist, medium dense.		X	SS	11 15	21	113
15	SM	[Dotted Pattern]	SILTY SAND , fine- to very coarse, dark grayish-brown (10YR 4/2), wet, medium dense.		X	SS	15 17	16	121
20	SC	[Diagonal Hatching]	CLAYEY SAND , very fine- to fine, light olive-brow (2.5Y 5/4), wet, medium dense.		X	SS	4 7	27	100
			End of boring at 20.5 feet. Groundwater encountered at 16 feet. Groundwater on 7/1/21 at 13.17 feet. Backfilled with native soils.						

IFE BORING - GINT STD US LAB.GDT - 8/20/21 17:02 - P:\N133001 SWC WILLARD ST.GINT.GPJ



Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u> <u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

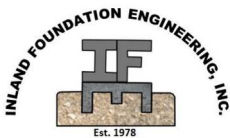
FIGURE NO.

LOG OF BORING B-03

DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
			This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.						
			ARTIFICIAL FILL, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, dense, strongly cemented.			AU			
	SC					SS	21 37	5	134
5						SS	12 22	8	131
	SC		CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, dense, moderately cemented.						
			End of boring at 5.5 feet. No groundwater encountered. Backfilled with native soils.						

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Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u> <u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

FIGURE NO.

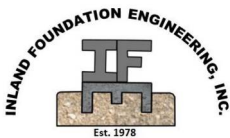
A-5

LOG OF BORING B-04

DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
			This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.						
			ARTIFICIAL FILL, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, dense.			AU			
5	SC					SS	15 24	5	129
	SC-SM		SILTY, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, dense.			SS	15 17	7	128

IFE BORING - GINT STD US LAB.GDT - 8/20/21 17:02 - P:\N133001 SWC WILLARD ST\GINT.GPJ



Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u> <u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

FIGURE NO.

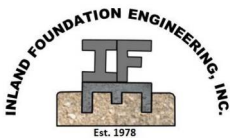
A-6

LOG OF BORING B-05

DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
			This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.						
	SC		ARTIFICIAL FILL, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, dense, weakly cemented.			AU			
						SS	21 27	5	124
5	SC-SM		SILTY, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, dense.			SS	17 20	7	133
			End of boring at 6.5 feet. No groundwater encountered. Backfilled with native soils.						

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Inland Foundation Engineering, Inc.







CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u> <u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

FIGURE NO.

A-7

LOG OF BORING B-06

DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
			This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.						
5	SC-SM		SILTY, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, loose to medium dense.			AU	8 7	4	118
	SM		SILTY SAND , fine- to coarse, dark grayish-brown (10YR 4/2), slightly moist, loose.			SS	6 4	5	115
			End of boring at 5.5 feet. No groundwater encountered. Backfilled with native soils.						

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Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u> <u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

FIGURE NO.

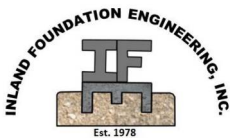
A-8

LOG OF BORING B-07

DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
			This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.						
			ARTIFICIAL FILL, CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, loose to medium dense.			AU			
5	SC					SS	10 10	6	124
	SC		CLAYEY SAND , very fine- to fine, dark grayish-brown (10YR 4/2), slightly moist, dense.			SS	19 16	8	126
			End of boring at 6.5 feet. No groundwater encountered. Backfilled with native soils.						

IFE BORING - GINT STD US LAB.GDT - 8/20/21 17:02 - P:\N133001 SWC WILLARD ST.GINT.GPJ



Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u> <u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

FIGURE NO.

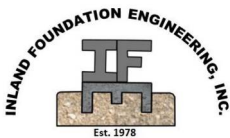
A-9

LOG OF BORING B-09

DRILLING RIG	<u>Mobile B-61</u>	DATE DRILLED	<u>6/30/21</u>	HAMMER TYPE	<u>Auto-Trip</u>
DRILLING METHOD	<u>Rotary Auger</u>	HAMMER WEIGHT	<u>140-lb.</u>	HAMMER DROP	<u>30-inches</u>
LOGGED BY	<u>FWC</u>	BORING DIAMETER	<u>8-inches</u>		
GROUND ELEVATION	<u>+/-</u>				

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
			<p>This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.</p>						
	SM	[Dotted Pattern]	SILTY SAND , very fine to fine, trace clay, gray brown, slightly moist to moist, medium dense.						
5	SC	[Diagonal Hatching]	CLAYEY SAND , fine to medium, dark gray brown, moist, medium dense.						
10	SC	[Diagonal Hatching]	CLAYEY SAND , very fine to fine, dark gray brown, slightly moist to very moist, dense.						
15			End of boring at 15 feet. No groundwater encountered.						

IFE BORING - GINT STD US LAB.GDT - 8/20/21 17:02 - P:\N133001 SWC WILLARD ST.GINT.GPJ

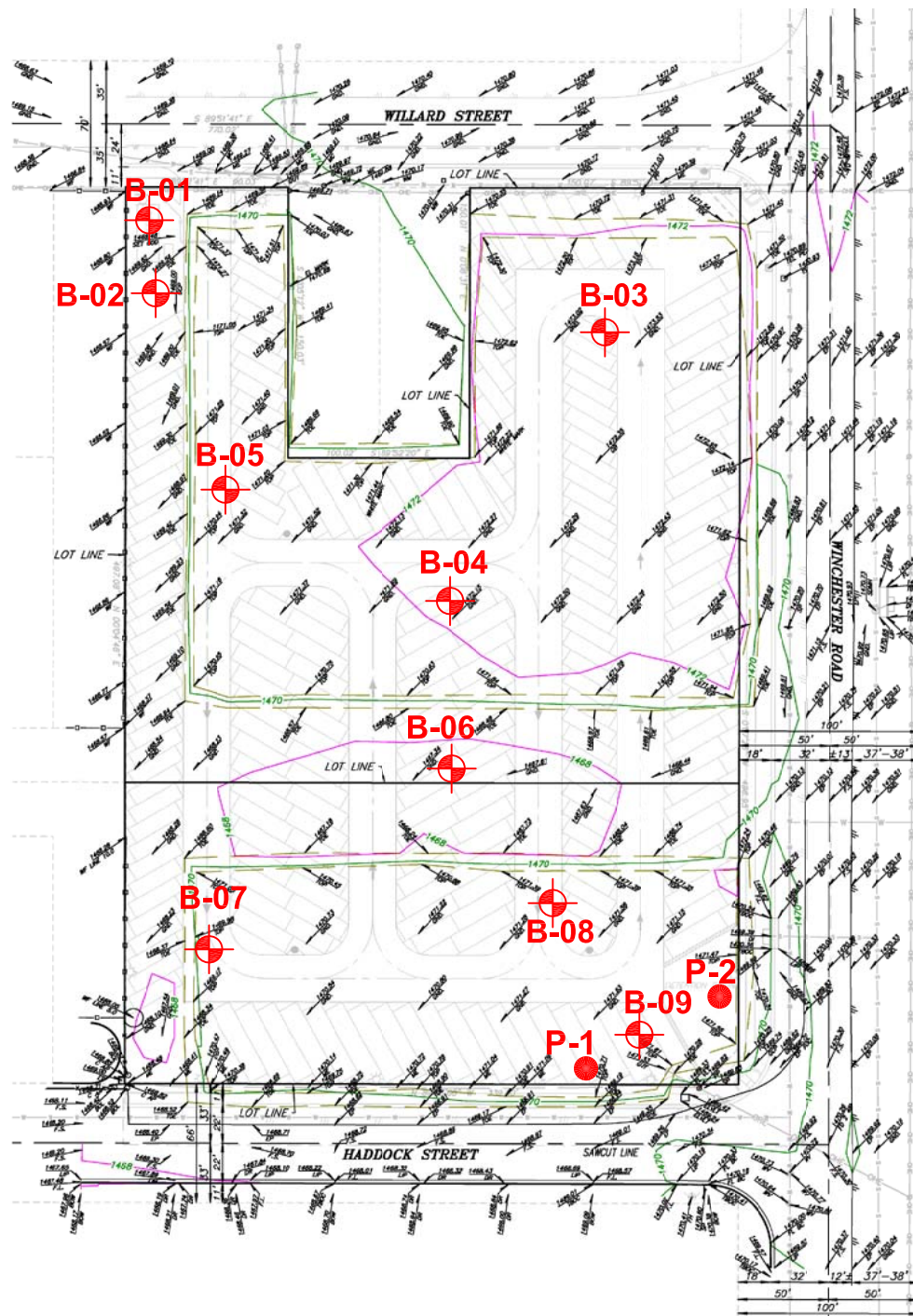


Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>
PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u> <u>Winchester, CA</u>
PROJECT NUMBER	<u>N133-001</u>

FIGURE NO.

A-11



Base Map Prepared By: Hzayen Design Group, Inc.

SITE PLAN
NO WORRIES! RV AND BOAT STORAGE
SWC WILLARD STREET AND STATE HIGHWAY 79
RIVERSIDE COUNTY, CALIFORNIA
APN 462-182-018 AND 462-185-006

⊕ = Approximate Location of Boring
 ● = Approximate Location of Infiltration Test

INLAND FOUNDATION ENGINEERING, INC. 1310 South Santa Fe Avenue San Jacinto, California (951) 654-1555 FAX (951) 654-0551		
DRAWN BY: ES	JOB NO.: N133-001	
SCALE: 1" = +/- 100	DATE: August 2021	A-12



***APPENDIX B –
Laboratory Testing***

APPENDIX B LABORATORY TESTING

Representative soil samples obtained from our borings were returned to our laboratory for additional observations and testing. Descriptions of the tests performed are provided below.

Unit Weight and Moisture Content: Ring samples were weighed and measured to evaluate their unit weight. A small portion of each sample was then tested for moisture content. The testing was performed per ASTM D2937 and D2216. The results of the testing are shown on the boring logs (Figure Nos. A-3 through A-11).

Maximum Density-Optimum Moisture Content: Two samples were selected for maximum density testing in accordance with ASTM D1557. The test results are presented graphically on Figure B-3.

Sieve Analysis: Five soil samples were selected for sieve analysis testing in accordance with ASTM D6913. These tests provide information for classifying the soil in accordance with the Unified Classification System. This classification system categorizes the soil into groups having similar engineering characteristics. The test results are shown on Figure B-4.

Atterberg Limits: Two samples were selected for Atterberg limits testing in accordance with ASTM D4318. These tests provide information regarding soil plasticity and are also used for classifying the soil in accordance with the Unified Classification System. The results are shown on Figure B-4.

Sand Equivalent: Seven samples were selected for sand equivalent testing in accordance with ASTM D2419. This test is used to indicate the relative proportions of clay-size or plastic fines and dust in granular soil and fine aggregate. Sand equivalent test results are shown in the following table.

Boring No.	Approx. Depth (ft.)	SE
B-01	0.0 - 2.3	19
B-03	0.0 - 5.0	16
B-04	0.0 - 6.0	17
B-05	0.0 - 4.5	18
B-06	0.0 - 5.0	18
B-07	0.0 - 6.0	17
B-08	0.0 - 4.8	17

Consolidation Testing: One sample was selected for consolidation testing in accordance with ASTM D2435. This test is used to evaluate the magnitude and rate of settlement of a structure or earth fill. The results of this testing are presented graphically on Figure No. B-5.

Expansion Index: One sample was selected for expansion index in accordance with ASTM D4829. This test provides information regarding the expansive characteristics of soil under standardized test conditions. The following table presents the results of this testing.

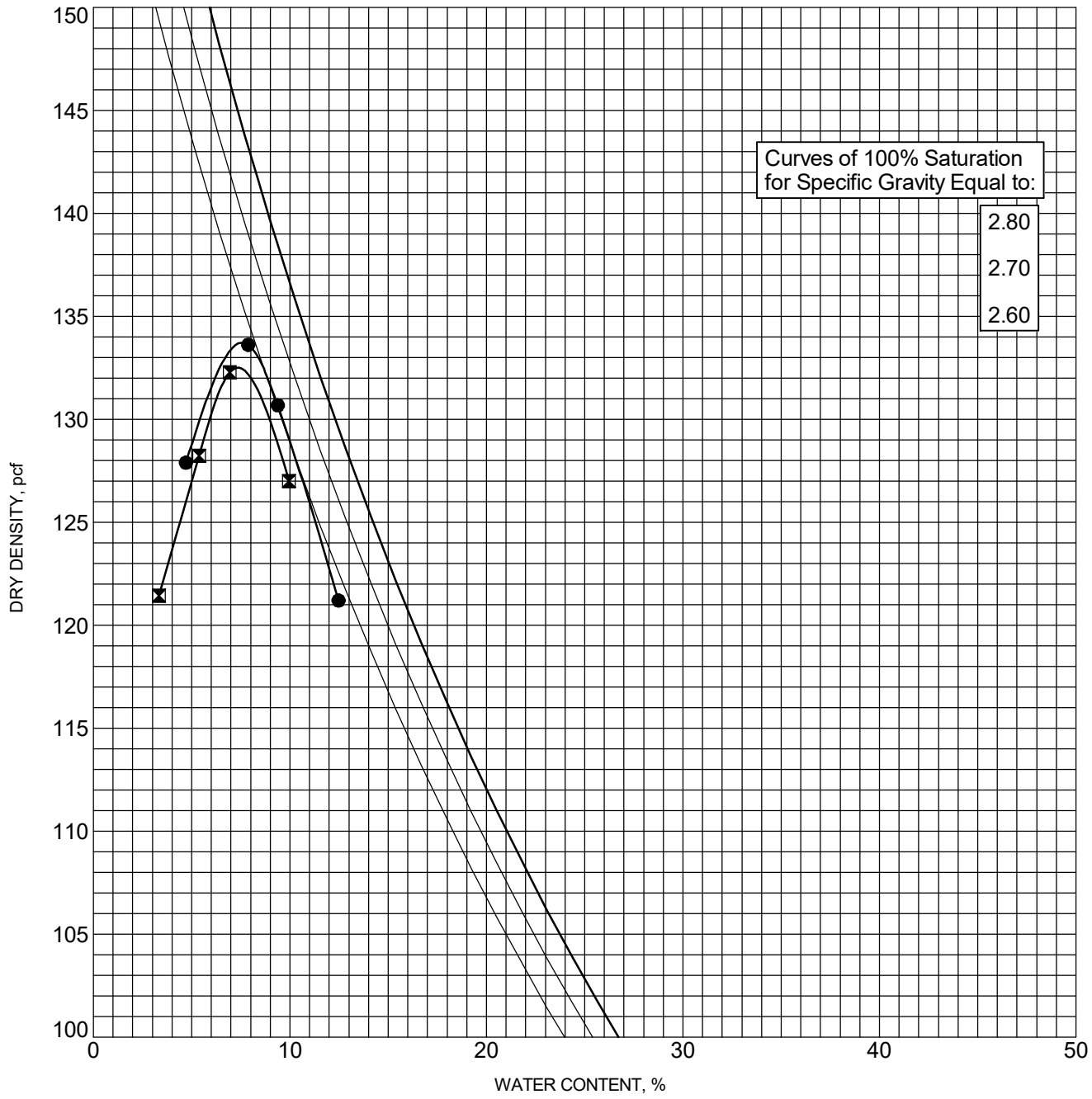
Sample Location	Sample Depth (ft)	Initial Dry Density (pcf)	Initial Moisture Content (%)	Expansion Index	Expansion Class
B-01	0.0 – 2.3	117.3	7.5	0	Very Low

Analytical Testing: One sample was transported to AP Engineering and Testing in Pomona, California to evaluate the concentration of soluble sulfates and chlorides, pH level, and resistivity of and within the on-site soils. The following table presents the results of this testing.

Sample Location	Sample Depth (ft.)	Water-Soluble Sulfates (ppm)	Chlorides (ppm)	Minimum Resistivity (ohm-cm)	pH
B-01	0-2.25	34	31	3,330	8.3

Direct Shear Strength: One sample was transported to AP Engineering and Testing in Pomona, California for direct shear strength testing in accordance with ASTM D3080. This testing measures the shear strength of the soil under various normal pressures and is used to develop parameters for foundation bearing capacity and lateral earth pressure. Test results are shown on Figure B-6.

R-value: One bulk sample was transported to AP Engineering and Testing in Pomona, California for R-value testing in accordance with ASTM D2844. This test measures the potential strength of subgrade, subbase, and base course materials for use in pavements. Test results are shown on Figure No. B-7.



BOREHOLE	DEPTH	Description of Materials	Max DD	Optimum WC
● B-01	2.3	CLAYEY SAND(SC)	133.7 PCF	7.5 %
☒ B-08	0.0	SILTY, CLAYEY SAND (SC-SM)	132.5 PCF	7.4 %



Inland Foundation Engineering, Inc.

MOISTURE-DENSITY CURVES (ASTM D1557)

FIGURE NO. B-3

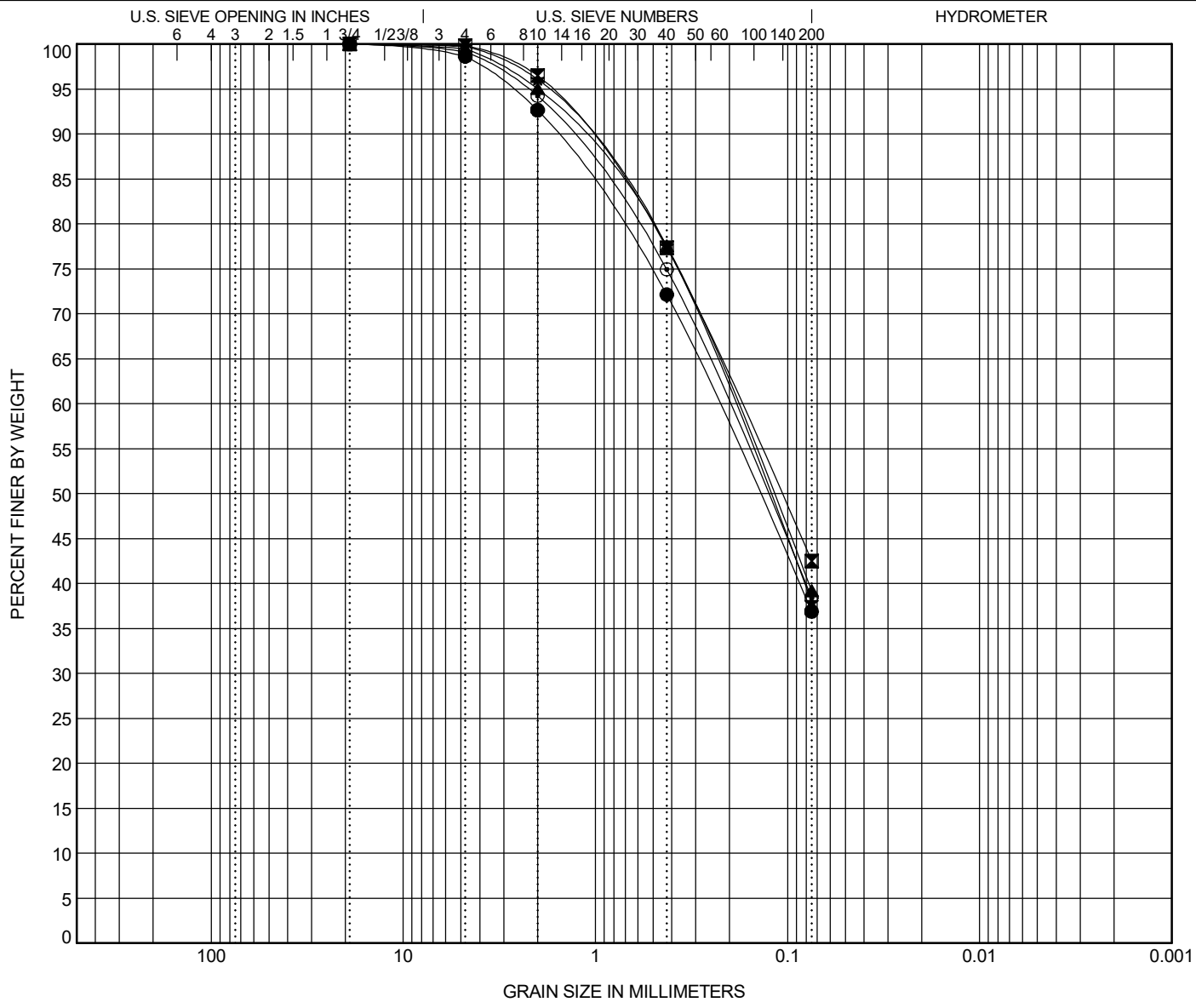
CLIENT No Worries! RV & Boat Storage

PROJECT NAME RV & Boat Storage Facility

PROJECT NUMBER N133-001

PROJECT LOCATION SWC Willard St. and Highway 79

Winchester, CA



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● B-01	2.3	CLAYEY SAND(SC)	23	15	8		
☒ B-01	13.0	CLAYEY SAND(SC)	30	20	10		
▲ B-03	0.0	CLAYEY SAND (SC)					
★ B-06	0.0	SILTY, CLAYEY SAND (SC-SM)					
◎ B-08	0.0	SILTY, CLAYEY SAND (SC-SM)					

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-01	2.3	19	0.234			1.4	61.7		36.9
☒ B-01	13.0	19	0.179			0.2	57.3		42.5
▲ B-03	0.0	19	0.192			0.5	60.3		39.2
★ B-06	0.0	19	0.197			0.2	61.8		38.0
◎ B-08	0.0	19	0.209			0.8	60.8		38.4

GRADATION CURVES (ASTM D6913, ASTM D4318)

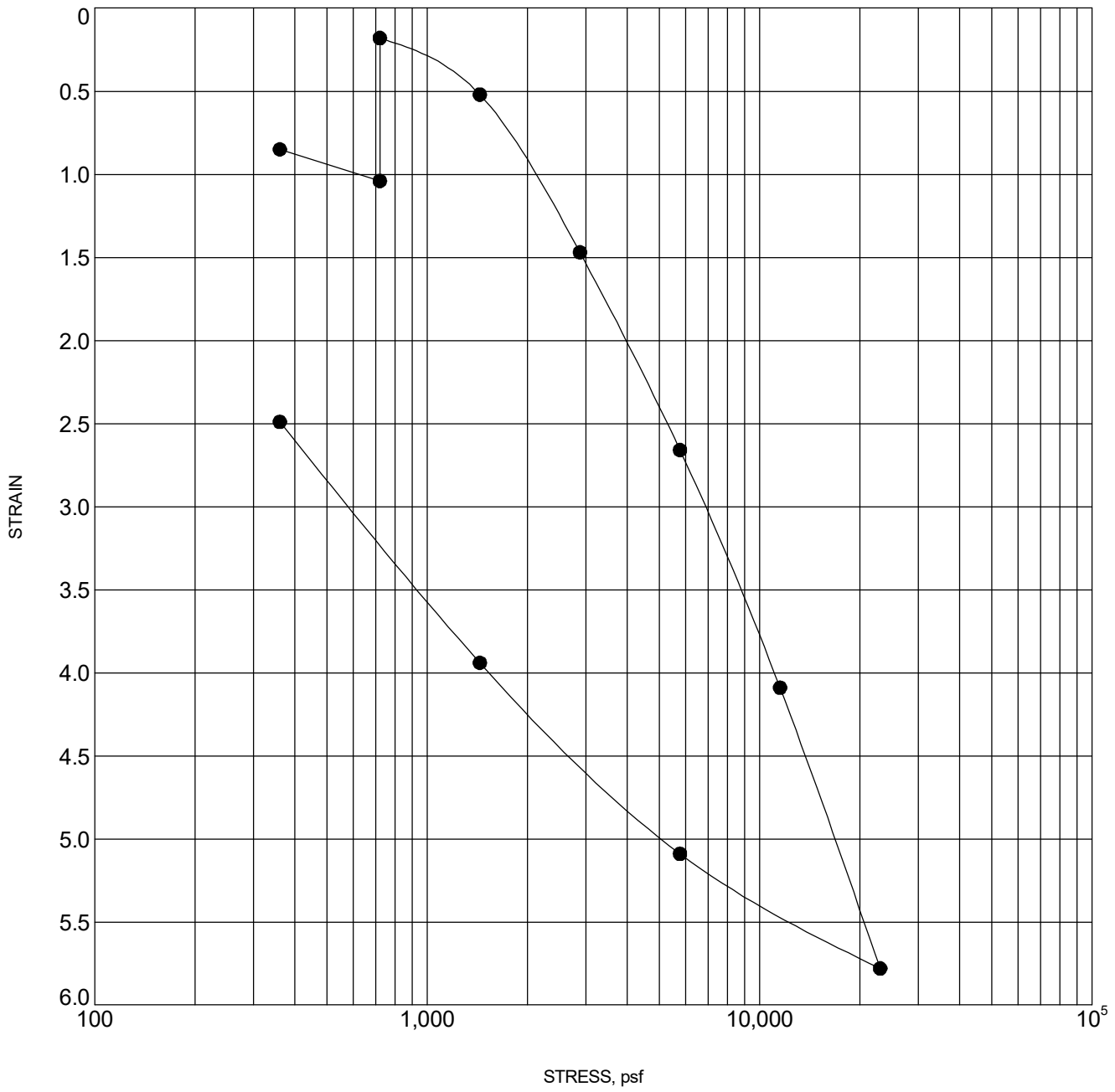


Inland Foundation Engineering, Inc.

FIGURE NO. B-4

CLIENT No Worries! RV & Boat Storage PROJECT NAME RV & Boat Storage Facility
 PROJECT NUMBER N133-001 PROJECT LOCATION SWC Willard St. and Highway 79
Winchester, CA

IFE SIEVE ANALYSIS - GINT STD US LAB.GDT - 8/20/21 14:37 - P:\INI 133\001 SWC WILLARD ST\GINT.GPJ



BOREHOLE	DEPTH	Classification	γ_d	MC%
● B-01	4.5	CLAYEY SAND (SC)	122	14

CONSOLIDATION TEST (ASTM D2435)

FIGURE NO. B-5



Inland Foundation Engineering, Inc.

CLIENT	<u>No Worries! RV & Boat Storage</u>	PROJECT NAME	<u>RV & Boat Storage Facility</u>
PROJECT NUMBER	<u>N133-001</u>	PROJECT LOCATION	<u>SWC Willard St. and Highway 79</u>
			<u>Winchester, CA</u>



DIRECT SHEAR TEST RESULTS
ASTM D 3080

Client: Inland Foundation Engineering
Project Name: No Worries RV & Boat
Project No.: N133-001
Boring No.: B-01
Sample No.: - **Depth (ft):** 1.5-2.5
Sample Type: Mod. Cal.
Soil Description: Sandy Silt w/traces of clay
Test Condition: Inundated **Shear Type:** Regular

Tested By: ST **Date:** 07/19/21
Computed By: NR **Date:** 07/20/21
Checked by: AP **Date:** 07/20/21

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
132.8	120.9	9.9	14.6	67	100	1	1.599	0.888
						2	2.340	1.395
						4	3.480	2.664

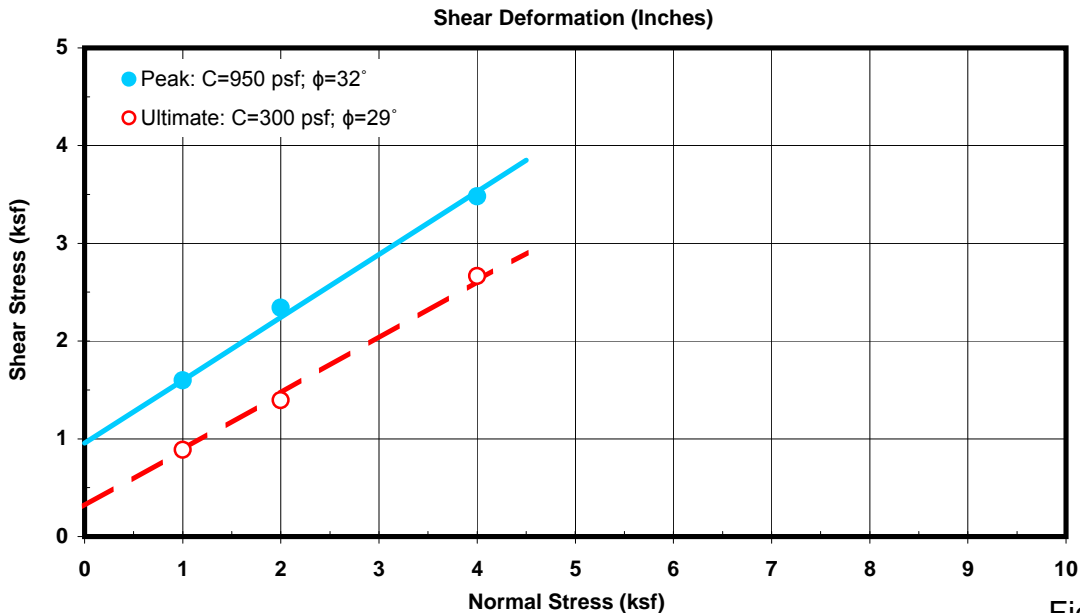
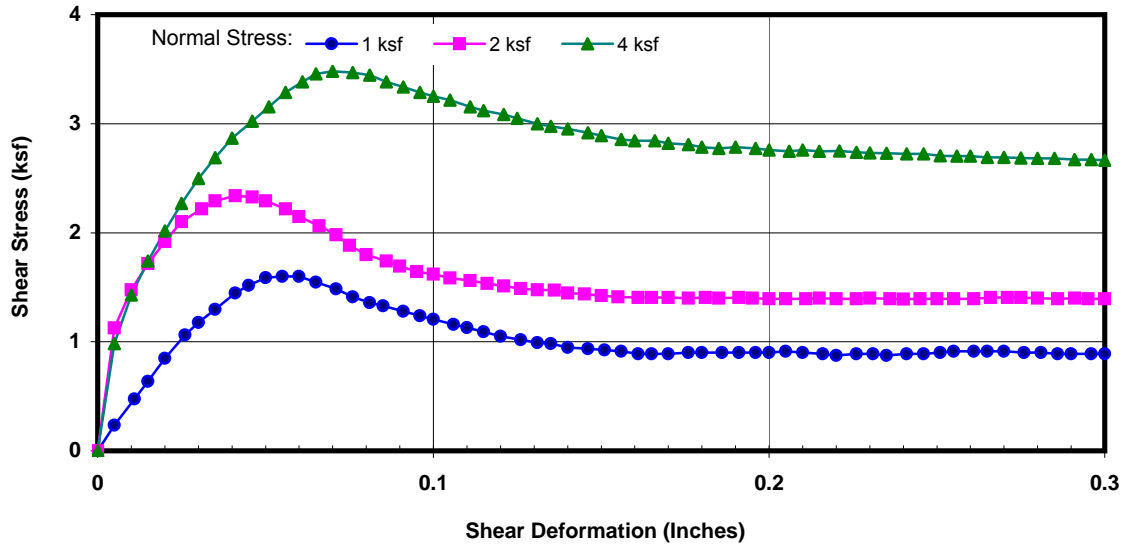


Figure No. B-6



R-VALUE TEST DATA
 ASTM D2844

Project Name:	<u>No Worries RV & Boat</u>	Tested By:	<u>ST</u>	Date:	<u>07/16/21</u>
Project Number:	<u>N133-001</u>	Computed By:	<u>KM</u>	Date:	<u>07/17/21</u>
Boring No.:	<u>B-03</u>	Checked By:	<u>AP</u>	Date:	<u>07/20/21</u>
Sample No.:	<u>-</u>	Depth (ft.):	<u>0-5</u>		
Location:	<u>N/A</u>				
Soil Description:	<u>Sandy Silt</u>				

Mold Number	C	A	B	
Water Added, g	50	0	0	
Compact Moisture(%)	12.8	11.3	9.8	
Compaction Gage Pressure, psi	70	250	350	
Exudation Pressure, psi	118	202	716	
Sample Height, Inches	2.5	2.3	2.6	
Gross Weight Mold, g	3077	3025	3133	
Tare Weight Mold, g	1969	1967	1967	
Net Sample Weight, g	1108	1058	1166	
Expansion, inches $\times 10^{-4}$	13	11	16	
Stability 2,000 (160 psi)	48/104	36/71	18/31	
Turns Displacement	5.34	4.55	3.89	
R-Value Uncorrected	20	41	73	
R-Value Corrected	20	36	75	
Dry Density, pcf	119.1	125.2	123.8	
Traffic Index	8.0	8.0	8.0	
G.E. by Stability	1.53	1.22	0.48	
G.E. by Expansion	0.04	0.04	0.05	

R-VALUE	By Exudation:	44
	By Expansion:	*N/A
	At Equilibrium: (by Exudation)	44
Remarks	Gf = 1.34, and 0.0 % Retained on the 3/4" *Not Applicable	

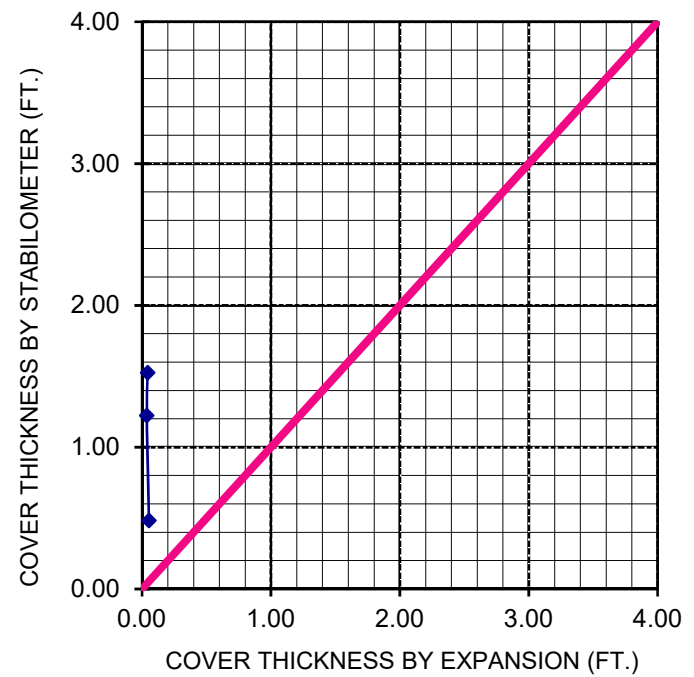
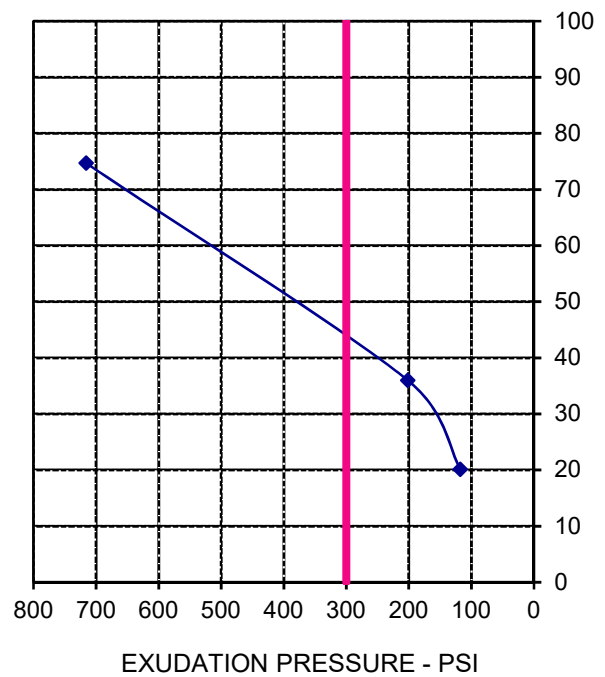


Figure No. B-7

***APPENDIX C –
Liquefaction and
Seismic Settlement Analysis***

APPENDIX C

LIQUEFACTION AND SEISMIC SETTLEMENT ANALYSIS

Liquefaction potential was evaluated using the GeoSuite® computer program (version 2.2.2.14). The seismic parameters included a horizontal acceleration of 0.60g and a Moment Magnitude of 7.8. This is based on published parameters for faults in California from the *Working Group on Earthquake Probabilities* (Field and others, 2008; Willis and others, 2008), considering a cascading effect of rupture along the entire length of the San Jacinto Fault Zone. We analyzed the soil profile logged for exploratory boring B-01. The analysis was based on the simplified procedures developed by Seed and Idriss that were more recently modified by Idriss and Boulanger (2008). The program calculates corrected normalized SPT N-values $(N_1)_{60}$ using the following formula (SCEC, 1999).

$$(N_1)_{60} = N_M C_N C_E C_B C_R C_S$$

Where; N_M = measured standard penetration resistance. Modified California sample blowcounts were converted to SPT blowcounts using Burmister's formula (1948) prior to input in the program. The modified California sample blowcounts were also corrected to account for lined samplers, as described in the C_S factor discussion below.

C_N = depth correction factor. GeoSuite® calculates C_N for each layer in the soil profile using the relationship suggested by Idriss and Boulanger (2008)

C_E = hammer energy ratio (ER) correction factor. A C_E factor of 1.3 was applied for the automatic trip hammer used during drilling. This was calculated using the relationship suggested by Idriss and Boulanger (2008) and SPT hammer energy measurements provided by the drilling subcontractor.

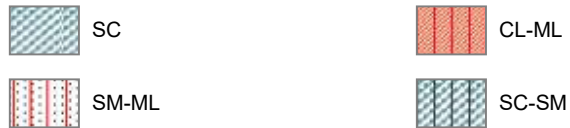
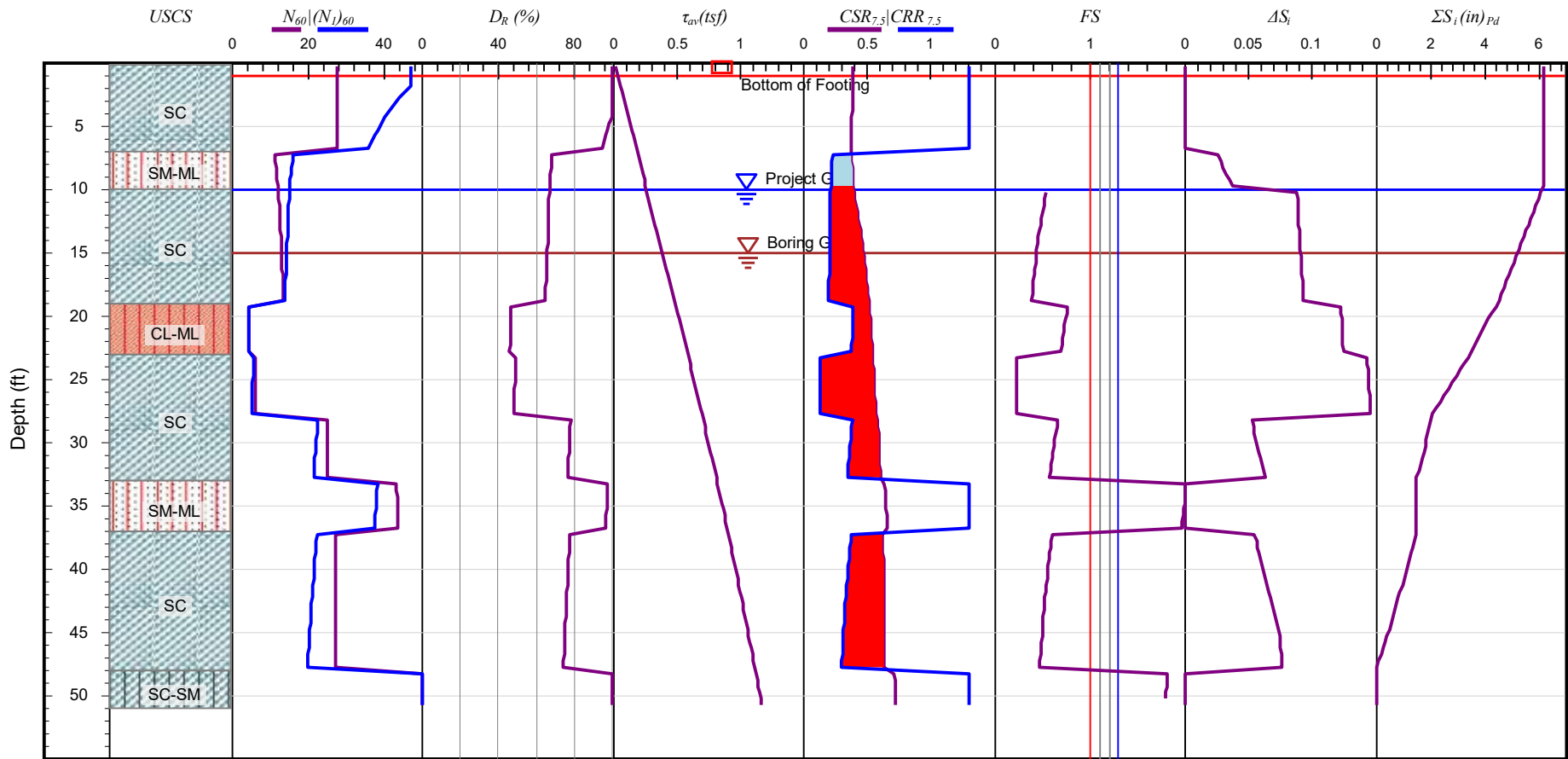
C_B = borehole diameter correction factor. A C_B factor of 1.0 was applied for the 8-inch diameter hollow-stem augers with inside diameters of four (4) inches (SCEC 1999).

C_R = rod length correction factor. GeoSuite® applies a C_R factor for each layer in the soil profile using the values in Table 5.2 of the 1999 SCEC guidelines, and assuming a rod stick up length (above the ground surface) of 3 feet.

C_S = correction factor for samplers with or without liners. SPT samplers without liners were used for this project. For SPT samplers without liners, GeoSuite® applies a C_S factor for each layer in the soil profile using the relationships from Seed et al. (1984) and suggested by Idriss and Boulanger (2008). Since GeoSuite® applies a C_S factor to

all layers in the soil profile, it is necessary to adjust blowcounts for modified California samplers with liners. This was done through an iterative process by initially dividing the modified California sampler blowcounts by an assumed C_s value of 1.2 prior to input in the program. Calculated C_s values were then checked against the assumed values and adjusted where necessary, so that the actual applied C_s value for modified California samples is 1.0.

The results of our analysis are shown on Figure C-3.



Earthquake & Groundwater Information:
 Magnitude = 7.8
 Max. Acceleration = 0.6 g
 Project GW = 10 ft
 Maximum Settlement = 6.15 in
 Settlement at Bottom of Footing = 6.15 in

Liquefaction: Idriss & Boulanger (2008)
 Settl.: Pradel (1998); [sat] Idriss & Boulanger (2008)
 Lateral spreading: Idriss & Boulanger (2008)
 M correction: [Sand; Clay] Boulanger & Idriss(2004)
 σ_v correction: Idriss & Boulanger (2008)
 Stress reduction: Idriss & Boulanger (2008)

Liquefaction Potential - SPT Data

Project:	RV and Boat Storage Facility			
Location:	SWC Willard St. and State Highway 79, Riverside County, California			
Project No.:	N133-001	Boring No.:	B-01	Figure:
				C-3



INLAND FOUNDATION ENGINEERING, INC.
 Consulting Geotechnical Engineers and Geologists

**APPENDIX D –
Infiltration Testing**

APPENDIX D INFILTRATION TESTING

Infiltration testing was conducted in general accordance with Appendix A - Infiltration Testing of Riverside County - Low Impact Development BMP Handbook. We performed shallow percolation testing per the Riverside County Department of Environmental Health test procedure. A staff geologist conducted the actual percolation testing with equipment and procedures outlined in the Riverside County Technical Guidance Manual.

Two percolation tests were performed in the vicinity of the proposed retention basin in the southeast portion of the site, at the locations shown on Figure No. A-7. The tests were performed at depths of approximately 48 inches below the existing ground surface. The test holes were excavated approximately eight (8) inches in diameter. Per the specified percolation test procedure, the test holes were filled with water to a depth of at least five (5) times the radius of the test holes. A two-inch thick layer of gravel was placed in the bottom of each test hole. In this case, the test holes were excavated and filled to a depth of at least 20 inches above the top of the gravel.

The test holes were presoaked prior to actual testing. The measured percolation rates ranged from 30 to 60 minutes per inch at a depth of 48.

Percolation test rates were converted to infiltration rates (I_c) using the Porchet method and the following equation:

$$I_c = \Delta H / 60r / \Delta t (r + 2H_{avg})$$

Where:

r = Test Hole Radius (in.)

H_{avg} = Average Height of Water during Test Interval (in.)

ΔH = Change in Water Height during Test Interval (in.), and

Δt = Time Interval (in.)

The corresponding calculated infiltration rates (I_c) ranged from 0.2 to 2.1 inches per hour. These values exclude factors of safety. The table below provides a summary of the test data with values for I_c .

Percolation Hole No.	Percolation Rate (Min./Inch)	Depth Below Existing Ground Surface (In.)	Infiltration Rate (I_c) (In./Hr.)
P-1	30	48	0.2
P-2	60	48	0.1

Appendix 4: Historical Site Conditions

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



PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Vacant Land

Southwestern corner of Willard
Street and Highway 79
Winchester, California 92596

Report Date: March 31, 2021
Partner Project No. 21-313179.1



Prepared for:

No Worries! RV and Boat Storage LLC
28447 Witherspoon Parkway
Valencia, California 91355

March 31, 2021

Mr. Tom Comber
No Worries! RV and Boat Storage LLC
28447 Witherspoon Parkway
Valencia, California 91355

Subject: Phase I Environmental Site Assessment
Vacant Land
Southwestern corner of Willard Street and Highway 79
Winchester, California 92596
Partner Project No. 21-313179.1

Dear Mr. Comber:

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 (949) 481-9818.

Sincerely,



Robert Vaughn
National Client 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 No Worries! RV and Boat Storage LLC for the property located at Southwestern corner of Willard Street and Highway 79 in Winchester, Riverside County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide No Worries! RV and Boat Storage LLC 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 southern side of Willard Street and the western side of Highway 79 within a residential and undeveloped area of Riverside County. Please refer to the table below for further description of the subject property:

Subject Property Data

Site Location:	Southwestern corner of Willard Street and Highway 79, Winchester, California
Property Use:	Vacant land
Land Acreage (Ac):	2.98 Ac
Number of Buildings:	None
Assessor's Parcel Number (APN):	462-182-018 and 462-185-006
Current Tenants:	None
Site Assessment Performed By:	Sheryl A. Amezcua of Partner
Site Assessment Conducted On:	March 31, 2021

The subject property is currently undeveloped land. No operations are conducted onsite.

According to available historical sources, the subject property was formerly developed with a single-family residence from 1901 to 1949; and has been undeveloped land from at least 1953 to the present. Tenants on the subject property were residential occupants from 1901 to 1949.

The immediately surrounding properties consist of undeveloped land, Willard Street beyond which are single-family residences to the north; Winchester Elementary School to the south across Haddock Street; undeveloped land and single-family residences to the east across Highway 79; and single-family residences to the west across Finch Street.

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 the California State Water Resources Control Board (SWRCB) GeoTracker database of an investigation conducted in the vicinity of subject property and topographic map interpretation, groundwater is inferred to be approximately 18 to 48 feet below ground surface (bgs) and flows toward the south-southwest.

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 evidence of RECs 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 evidence CRECs 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 evidence of HRECs 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 evidence of 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 Southwestern corner of Willard Street and Highway 79 in Winchester, 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 RECs 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.

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- 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 Southwestern corner of Willard Street and Highway 79 in Winchester, 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

No Worries! RV and Boat Storage LLC 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 No Worries! RV and

Boat Storage LLC. 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 set forth below:

- Interviews with past or current 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 the AAI User Questionnaire from the Report User. This information was not provided at the time of the assessment.
- Partner was unable to document the property use back to prior to 1915, at five-year intervals or less, which constitutes a data gap. Except for property tax files and recorded land title records, which were not considered to be sufficiently useful, Partner reviewed all standard historical sources and conducted appropriate interviews. The absence of this information is not considered to represent a significant data gap, as the earliest available historical documentation (1938 aerial photograph) shows the subject property to be developed with a single-family residence. Additionally, no significant changes in property use were identified during coverage gaps of greater than five years.
- Partner's view of the ground during the site assessment was obstructed due to dense season weed and grass groundcover. 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 Southwestern corner of Willard Street and Highway 79 in Winchester, California is located on the southern side of Willard Street and the western side of Highway 79. According to information obtained from the Riverside County Assessor and Chicago Title Company records, the subject property is legally described as *LOT:1,2,3 BLK:38 1.89 ACRES M/L IN LOTS 1, 2, 3 & 7 BLK 38 MB 007/011 MC MULLEN SUB* (APN 462-182-018) and *LOT:1,2,3 BLK:43 1.09 ACRES M/L IN LOTS 1, 2, 3 & 4 BLK 43 MB 002/011 TOWN OF WINCHESTER* (APN 462-185-006) and ownership is vested in Empire Communities.

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 undeveloped land. No operations are conducted onsite.

The subject property is designated for RR Rural Residential for development by the County of Riverside.

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 residential and undeveloped 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: Undeveloped land (no address), Willard Street beyond which are single-family residences (32910, 32924, 32940 and 32952 Willard Street)

South: Haddock Street beyond which is Winchester Elementary School (28751 Winchester Road)

East: Highway 79-Winchester Road beyond which is undeveloped land (no address) and single-family residences (28604 Winchester Road, 33008 and 33025 Haddock Street)

West: Finch Street beyond which are single-family residences (32925 Willard Street, 32904 Finch Street, 32902 Haddock Street)

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) *Winchester, California* Quadrangle 7.5-minute series topographic map, dated 2012, was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 1470 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping gently toward the south-southwest.

A copy of the topographic map is included as Figure 3.

2.4.2 Hydrology

According to topographic map interpretation, the direction of groundwater flow in the vicinity of the subject property is inferred to be toward the south-southwest. The nearest surface water in the vicinity of the subject property is an irrigation canal located approximately 0.29-mile to the south of the subject property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

No potable water is currently supplied to the subject property. According to available information, a public water system operated by the Eastern Municipal Water District serves the subject property vicinity. According to a representative of the Eastern Municipal Water District, shallow groundwater directly beneath the subject property is not utilized for domestic purposes. The source of public water for the City of Winchester is water from the Hemet Filtration Plant. The Hemet Water Filtration Plant treats water from the State Water Project. This plant uses the latest ultra filtration technology to remove particulate contaminants and produce quality, drinking water. Local groundwater also supplies this area.

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 the California SWRCB GeoTracker database, of an investigation conducted in the vicinity of subject property, groundwater is inferred to be approximately 18 to 48 feet bgs.

2.4.3 Geology/Soils

The site is located within the Peninsular Range Geomorphic Province, an area characterized by active northeast trending strike slip faults, including the San Jacinto to the northwest, and the Elsinore to the southwest. Locally, the subject site is within the upland area just east of the Temecula Valley and is primarily underlain by shallow relatively soft sedimentary bedrock of the Pauba formation. Drainage from the site flows southwestwards into Temecula Creek. The project site is situated between the Santa Rosa Mountains and the San Jacinto Mountains to the east; and Santa Ana Mountains to the west and south. The near-surface deposits in the vicinity of the subject site are indicated to be comprised of recent alluvium consisting of unconsolidated sands, silt, and clays derived from erosion of local mountain ranges.

Based on information obtained from the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Domino fine sandy loam and Exeter sandy loam. The Domino series consists of moderately well drained, soils of alluvium derived from granite on alluvial fan landforms. The Exeter series consists well drained soils with a similar description as the Domino series. Slopes range from zero to two percent.

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 Number 06065C2080H, dated April 19, 2017, the subject property appears to be located in unshaded Zone X, an area of minimal flood hazard 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
1901-1949	Topographic Maps Aerial Photographs	Single-family Residence
1953-Present	Aerial Photographs, Onsite Observations	Undeveloped Land

Tenants on the subject property were residential occupants from 1901 to 1949.

No 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). The following was visible on the subject property and adjacent properties during the aerial photograph review:

Date:	1938, 1949	Scale:	1"=500'
Subject Property:	Appears to be undeveloped land and developed with a single-family residence within the eastern-central portion with scattered trees		
North:	Appears to be undeveloped land		
South:	Appears to be developed with a farmstead		
East:	Appears to be undeveloped land across a road		
West:	Appears to be undeveloped land		

Date:	1953, 1961, 1967	Scale:	1"=500'
Subject Property:	Appears to be undeveloped land with scattered trees		
North:	No significant changes visible		
South:	Appears to be developed with a commercial building and smaller structure across a dirt road		
East:	No significant changes visible except for the expansion of the road		
West:	No significant changes visible		

Date:	1978	Scale:	1"=500'
Subject Property:	No significant changes visible		
North:	Appears to be additionally developed with buildings and landscaping		
South:	Appears to be additionally developed with buildings and landscaping		
East:	Appears to be developed with single-family residences within the northern and southern portions with no significant changes visible in remaining areas.		
West:	No significant changes visible		

Date:	1985	Scale:	1"=500'
Subject Property:	No significant changes visible		
North:	Appears to be developed with two single-family residences, a road beyond which is		

Date:	1985	Scale:	1"=500'
	a single-family residence		
South:	No significant changes visible		
East:	No significant changes visible		
West:	Appears to be developed with a single-family residence with no significant changes visible in remaining areas		

Date:	1989, 1996, 2002, 2006	Scale:	1"=500'
Subject Property:	No significant changes visible		
North:	No significant changes visible		
South:	Appears to be developed with the current complex of buildings		
East:	No significant changes visible		
West:	Appears to be developed with single-family residences within the northern and southern portions with no significant changes visible in remaining areas		

Date:	2009, 2012, 2016	Scale:	1"=500'
Subject Property:	No significant changes visible		
North:	The previously noted single-family residences are absent; there are no significant changes visible in remaining areas		
South:	No significant changes visible		
East:	No significant changes visible		
West:	No significant changes visible		

Copies of the aerial photographs are included in Appendix B.

3.2 Fire Insurance Maps

Partner contracted with EDR to search for Sanborn Map coverage of the subject property. Sanborn map coverage was not available for the subject property.

A copy of the *Certified Sanborn Map Report* is included in Appendix B.

3.3 City Directories

Partner reviewed historical city directories obtained from EDR for past names and businesses that were listed for the subject property and adjacent properties. City directories were not identified for the subject property. The adjacent properties were identified as occupied by private residents and the Winchester School from 1992 to 2017. No listings of environmental concern were identified.

Copies of reviewed city directories are included in Appendix B.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR. The following was depicted on the subject property and adjacent properties during the topographic map review:

Date: 1901, 1942, 1943, 1947

Subject Property: Depicted as developed with a residential-type structure
North: Depicted as undeveloped land
South: Depicted with residential-type structures across an unpaved road
East: Depicted as undeveloped land across Patterson Avenue
West: Depicted as undeveloped land across an unpaved road

Date: 1953, 1973

Subject Property: Depicted as undeveloped land
North: No significant changes depicted
South: Depicted as developed with a school
East: No significant changes depicted across Winchester Road (a secondary highway)
West: No significant changes depicted

Date: 1979

Subject Property: No significant changes depicted
North: No significant changes depicted
South: No significant changes depicted with additional commercial-type buildings
East: Depicted as developed with single-family residences within the northern and southern portions with no significant changes depicted in remaining areas
West: No significant changes depicted

Copies of reviewed topographic maps are/ included in Appendix B.

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:	CalEPA Regulated Sites Portal
Agency Address:	https://siteportal.calepa.ca.gov/nsite/ 1001 I Street, Sacramento, California 95814
Agency Phone Number:	(916) 323-2514
Date of Contact:	March 19, 2021
Method of Communication:	Online Review
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 Cal/EPA.

4.1.2 Health Department

Regulatory Agency Data

Name of Agency:	County of Riverside, Department of Environmental Health, Hazardous Materials Management Division (CRDEH-HMMD)
Point of Contact:	FOIA Officer, Suzanne Cauffiel
Agency Address:	4965 County Circle Drive, Riverside, California
Agency Phone Number:	(951) 358-5055
Date of Contact:	March 19, 2021
Method of Communication:	Email
Summary of Communication:	According to the CRDEH-HMMD records are searched by address. The response to the FOIA was that the application for a records search is incomplete. As the subject property has no assigned addresses, a search of the records cannot be completed.

4.1.3 Air Pollution Control Agency

Regulatory Agency Data

Name of Agency:	South Coast Air Quality Management District (SCAQMD)
Point of Contact:	Facility Information Detail (FIND) Database
Agency Address:	http://www3.aqmd.gov/webappl/fim/prog/search.asp 21865 Copley Drive, Diamond Bar, California
Agency Phone Number:	(909) 396-2000
Date of Contact:	March 19, 2021
Method of Communication:	Online Review
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 SCAQMD.

4.1.4 Regional Water Quality Agency

Regulatory Agency Data

Name of Agency:	California State Water Resources Control Board (SWRCB)
Point of Contact:	SWRCB GeoTracker Database
Agency Address:	http://geotracker.waterboards.ca.gov/ 1001 I Street, Sacramento, California 95814
Agency Phone Number:	(916) 341-5250
Date of Contact:	March 19, 2021
Method of Communication:	Online Review
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 SWRCB.

4.1.5 Department of Toxic Substances Control

Regulatory Agency Data

Name of Agency:	California Department of Toxic Substances Control (DTSC)
Point of Contact:	DTSC EnviroStor and Hazardous Waste Tracking System Databases
Agency Address:	http://www.envirostor.dtsc.ca.gov/public/ http://hwts.dtsc.ca.gov/report_search.cfm?id=5 1001 I Street, Sacramento, California 95814
Agency Phone Number:	(916) 324-1826
Date of Contact:	March 19, 2021
Method of Communication:	Online Review
Summary of Communication:	No records regarding hazardous substance use, storage or releases, manifests 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: Riverside County Building and Safety Department
Point of Contact: Public Records Coordinator
Agency Address: 4080 Lemon Street, 9th Floor, Riverside, California 92501
Agency Phone Number: (951) 944-1800
Date of Contact: March 19, 2021
Method of Communication: Telephone
Summary of Communication: No building permits were identified on file with the RCBSD.

4.1.7 Planning Department

Regulatory Agency Data

Name of Agency: Riverside County Planning Department (RCPD)
Point of Contact: Online Review
Agency Address: https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public
4080 Lemon Street, 9th Floor, Riverside, California 92501
Agency Phone Number: (750) 863-8277
Date of Contact: March 19, 2021
Method of Communication: Online Review
Summary of Communication: According to records reviewed, the subject property is zoned RR Rural Residential for development by the County of Riverside.

4.1.8 Oil & Gas Exploration

Regulatory Agency Data

Name of Agency: California Geologic Energy Management Division (CalGEM)
Point of Contact: CalGem Well Finder Mapping Application
Agency Address: <https://maps.conservation.ca.gov/doggr/wellfinder/#close>
801 K Street, MS 24-01, Sacramento, California 95814
Agency Phone Number: (916) 322-1080
Date of Contact: March 19, 2021
Method of Communication: March 19, 2021
Online Review
Summary of Communication: According to CalGEM no oil 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) and Chicago Title Company (CTC)
Point of Contact: Online Records Repository
Agency Address: <http://www.asrclkrec.com/>
<https://premier.ctic.com/#login>
4080 Lemon Street, 1st Floor Riverside, California
Agency Phone Number: (951) 955-6200
Date of Contact: March
Method of Communication: Online Review

Regulatory Agency Data

Summary of Communication: According to records reviewed, the subject property is identified by Assessor Parcel Numbers (APNs) 462-182-018 and 462-185-006 and is currently owned by Empire Communities. The subject property consists of 2.98 acres of vacant land.

Copies of pertinent documents obtained from the regulatory agencies listed above, if available, are included in Appendix B.

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 SEMS Site	0.50	N	N	N
Federal SEMS-Archive 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, SGG CESQG	0.25	N	N	N/A
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 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/CA FID UST/HIST UST/SWEEPS UST)	0.25	N	N	N/A
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
CUPA Listings Sites	0.50	N	N	N
Miscellaneous Databases	Varies	N	N	N
EDR MGP	1.00	N	N	N
EDR Hist Auto	0.125	N	N	N/A
EDR Hist Cleaner	0.125	N	N	N/A

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.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report.

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.

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 No Worries! RV and Boat Storage LLC (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

The owner of the subject property was not available to be interviewed at the time of the assessment.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User. The information requested was not received prior to the issuance of this report.

5.1.3 Interview with Key Site Manager

A key site manager was not provided.

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: Sheryl A. Amezcua

Site Assessment Conducted On: March 31, 2021

Partner was unaccompanied during the site reconnaissance activities.

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

Solid waste is not currently generated at the subject property. No evidence of illegal dumping of solid waste was observed during the site reconnaissance.

6.1.2 Sewage Discharge and Disposal

The subject property is not currently serviced by a sanitary sewer system. The City of Winchester services the subject property vicinity. No wastewater treatment facilities or septic systems were observed or reported on the subject property.

6.1.3 Surface Water Drainage

Stormwater is removed from the subject property primarily by infiltration to unpaved ground surfaces or surface water runoff toward stormwater drains on the adjacent properties or the adjacent right-of-way.

The subject property does not appear to be a designated wetland area, based on information obtained from the United States Fish and Wildlife Service Online *Wetlands Mapper*; 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

No heating or cooling equipment were observed on the subject property. Electricity and natural gas for the subject property vicinity are provided by Southern California Edison and the Southern California Gas Company.

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 is not currently generated at the subject property. No industrial process is currently performed at the subject property.

6.1.7 Septic Systems

No septic systems were observed or reported on the subject property.

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 hazardous substances or petroleum products were observed on the subject property during the site reconnaissance.

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 the site 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 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 constructed prior to 1981 and have not been appropriately tested are "presumed asbestos-containing material" (PACM).

No buildings or structures are located on the subject property. As such, an asbestos evaluation was not required by the 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.

No buildings or structures are located on the subject property. As such, an LBP evaluation was not required by the 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

No potable water is currently supplied to the subject property. However, according to available information, a public water system operated by the Eastern Municipal Water District serves the subject property vicinity. According to a representative of the Eastern Municipal Water District, shallow groundwater directly beneath the subject property is not utilized for domestic purposes. The source of public water for the City of Winchester is water from the Hemet Filtration Plant. The Hemet Water Filtration Plant treats water from the State Water Project. This plant uses the latest ultrafiltration technology to remove particulate contaminants and produce quality, drinking water. Local groundwater also supplies this area. According to the 2019 Annual Water Quality Report, water supplied to the subject property vicinity 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).

No buildings or structures are located on the subject property. As such, a mold evaluation was not required by the scope of services.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises. PCBs

A pole-mounted transformer was observed on the adjacent property to the north. No staining or leakage was observed in the vicinity of the transformer. Based on these observations, the presence of adjacent transformers is not expected to represent a significant environmental concern.

No additional 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

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 evidence of RECs 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 evidence CRECs 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 evidence of HRECs 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 evidence of 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 Southwestern corner of Willard Street and Highway 79 in Winchester, 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 RECs 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 Southwestern corner of Willard Street and Highway 79 in Winchester, 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:



Sheryl A. Amezcua
Environmental Professional

Reviewed By:



Christine D. Nguyen
Senior Author



Robert Vaughn
National Client Manager

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.

California Environmental Protection Agency (Cal EPA) accessed via the Internet, March 2021

California State Department of Geologic Energy Management Division (CalGEM), accessed via the Internet, March 2021

California State Department of Toxic Substances Control – EnviroStor, accessed via the Internet, XXXX 2021.

California State Department of Toxic Substances Control – Hazardous Waste Tracking System, accessed via the Internet, March 2021

California State Water Resources Control Board – GeoTracker, accessed via the Internet, March 2021

Environmental Data Resources, Inc. (EDR), 6 Armstrong Road, 4th floor, Shelton, Connecticut 06484

EDR, Certified Sanborn Map Report, March 2021

EDR, Aerial Photo Decade Package, March 2021

EDR, City Directory Abstract, March 2021

EDR, Historical Topo Map Report, March 2021

EDR, Radius Map Report, March 2021

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via the internet, March 2021

Google Earth accessed via the Internet, March 2021

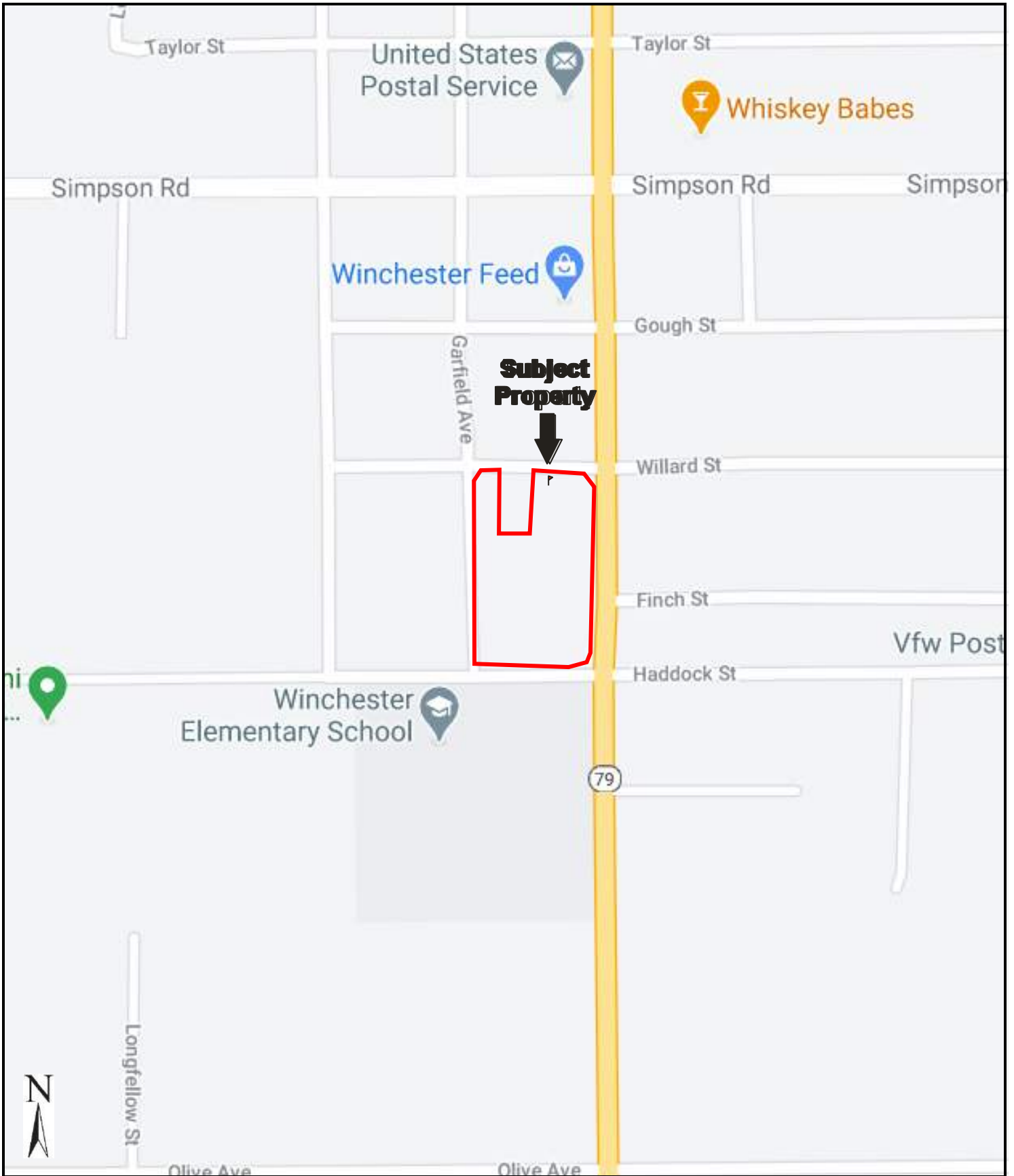
United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, March 2021

United States Department of Fish & Wildlife Service *Wetlands Mapper* accessed via the internet, March 2021

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, March 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. 21-313179.1

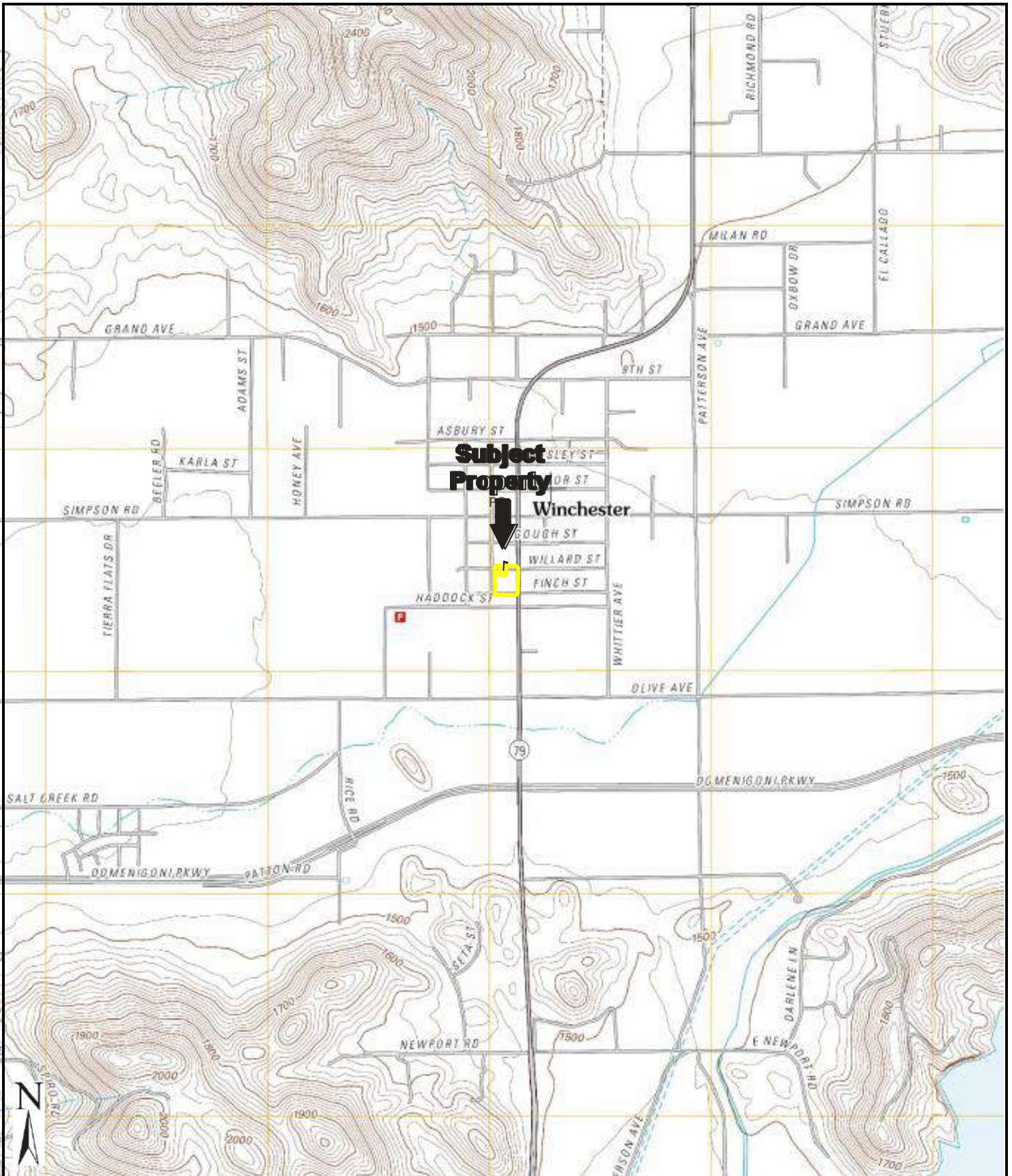


**GROUNDWATER
FLOW**



KEY:
Subject Property 

FIGURE 2: SITE PLAN
Project No. 21-313179.1



USGS 7.5 Minute Winchester, California Quadrangle
 Created: 2012

KEY:
 Subject Property 

APPENDIX A: SITE PHOTOGRAPHS



1. View of the southeastern portion of the subject property facing north.



2. Western facing view of the southern portion.



3. View facing northwest of the central portion.



4. View of a stormwater drain: not in use.



5. View of the central portion facing west.



6. Western-facing view of the northern portion of the subject property.



7. Southern-facing view of the eastern portion



8. Southern-facing view of the central portion.



9. Southern-facing view of the western portion.



10. View of the central portion facing east.



11. View of the southern-central portion.



12. Eastern-facing view of the southern portion of the subject property.



13. View of the southern central portion.



14. View of the central portion facing north.



15. View of a northern adjacent property across Willard Street.



16. View of the southern adjacent property across Haddock Street.



17. View of an eastern adjacent property across Highway 79-Winchester Road



18. View of a western adjacent property across Finch Street

APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION



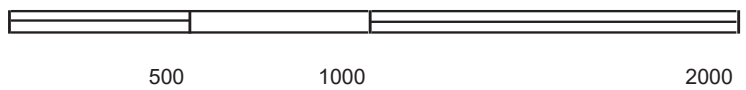
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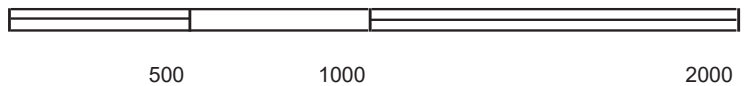
2000



Key: Subject Property 



Key: Subject Property 



Key: Subject Property 



500

1000

2000

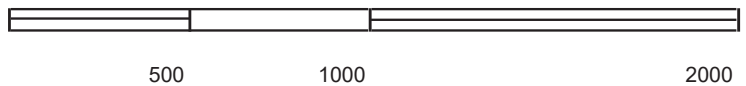
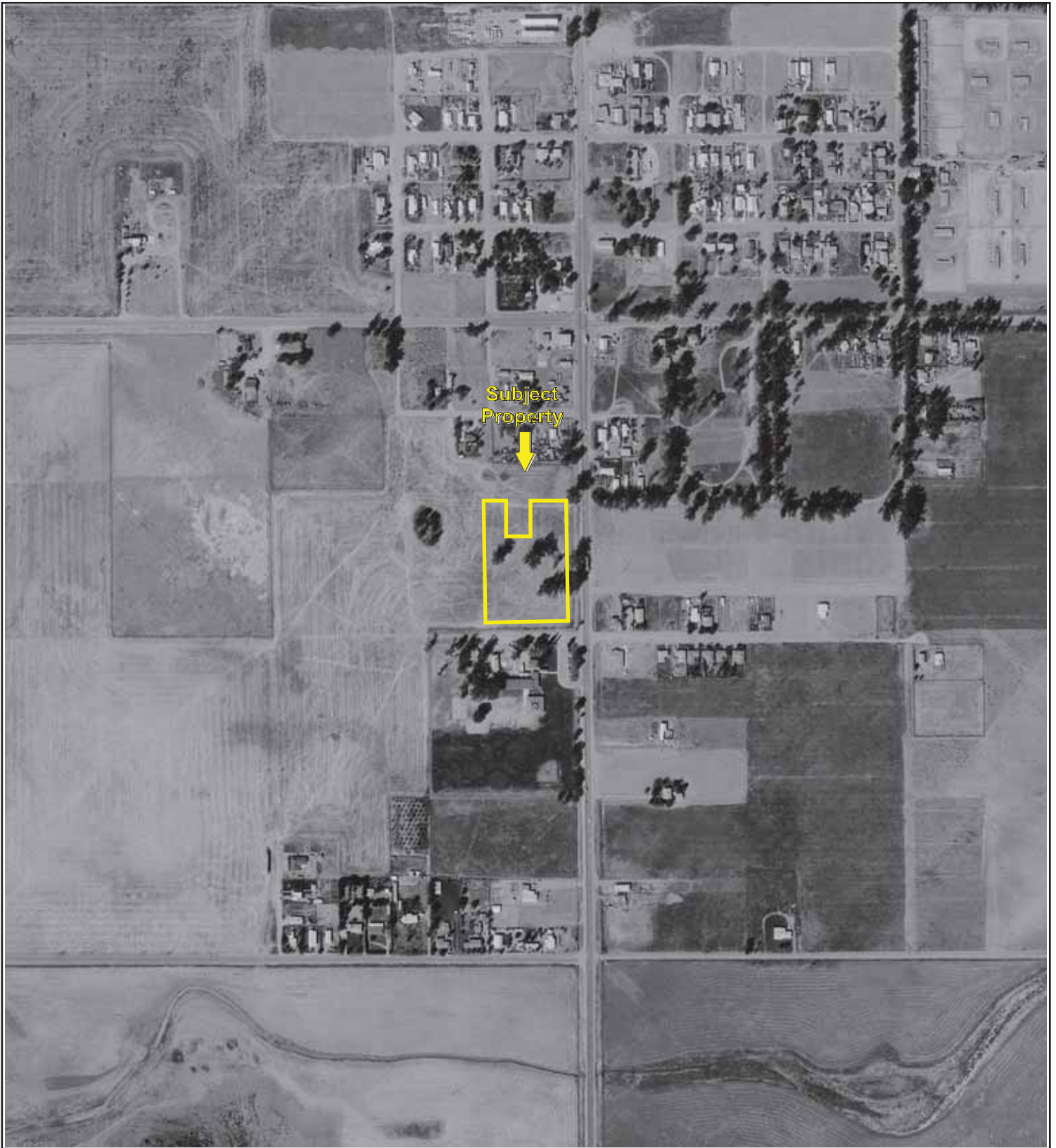


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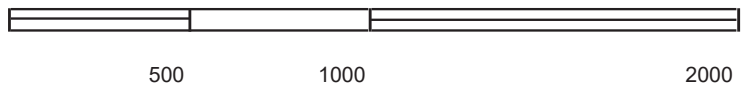


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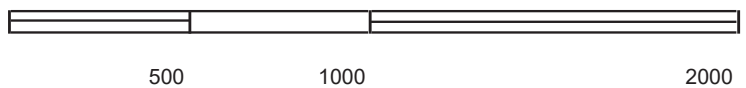
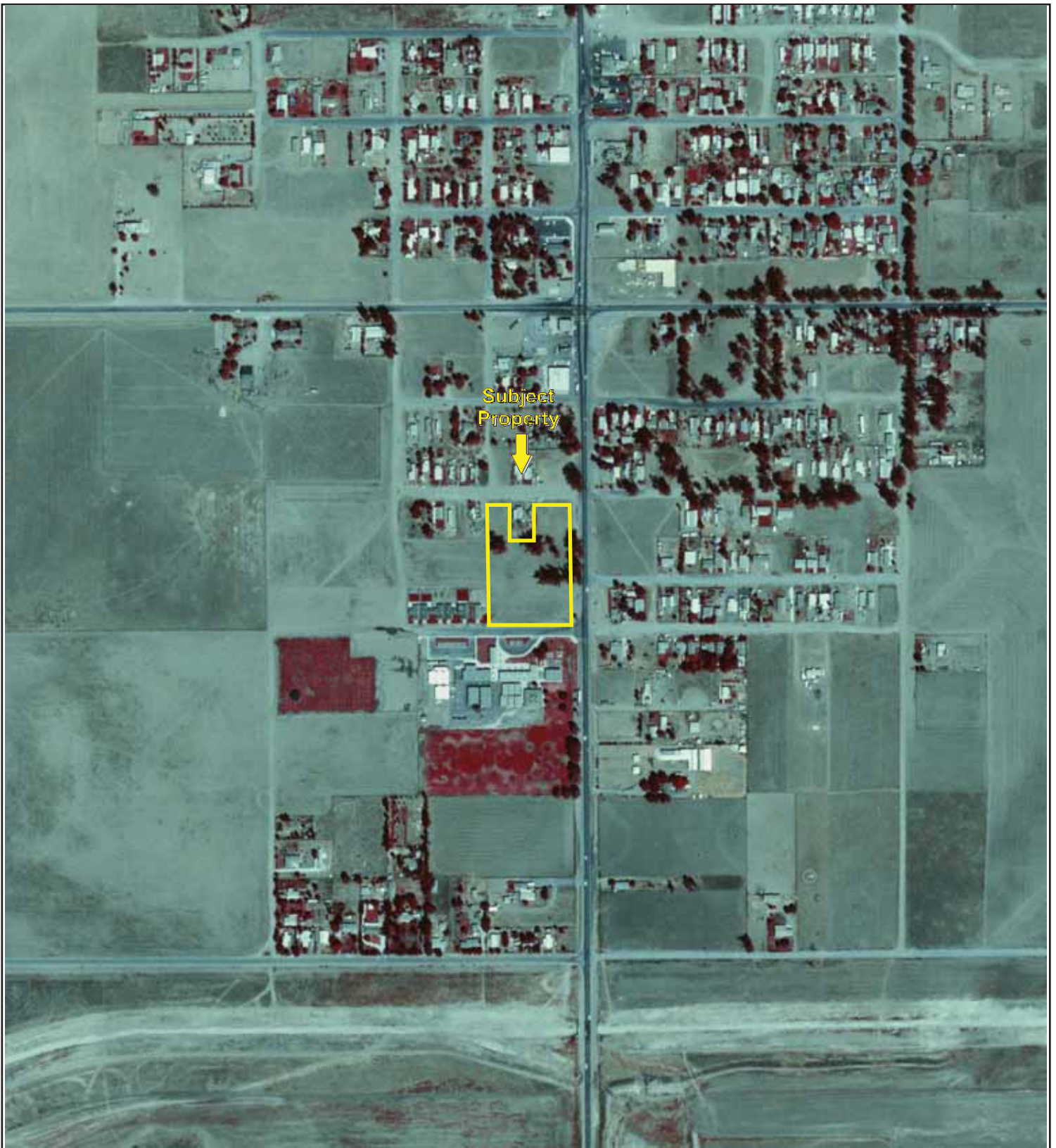
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Key: Subject Property 



Key: Subject Property 



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Key: Subject Property 



Key: Subject Property 

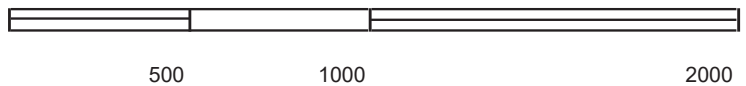


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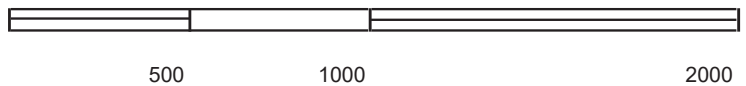
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Key: Subject Property 



Key: Subject Property 



Key: Subject Property 

APNs 462-182-018 & 462-185-006

APNs 462-182-018 & 462-185-006

WINCHESTER, CA 92596

Inquiry Number: 6410695.3

March 18, 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

03/18/21

Site Name:

APNs 462-182-018 & 462-185-
APNs 462-182-018 & 462-185-
WINCHESTER, CA 92596
EDR Inquiry # 6410695.3

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Krystal Dimmeler



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PO # 21-313179.1
Project 21-313179.1



Sanborn® Library search results

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UNMAPPED PROPERTY

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- Library of Congress
- University Publications of America
- EDR Private Collection

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APNs 462-182-018 & 462-185-006

APNs 462-182-018 & 462-185-006
WINCHESTER, CA 92596

Inquiry Number: 6410695.5
March 22, 2021

The EDR-City Directory Image Report

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with any questions or comments.

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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 type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2014	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
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1995	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1992	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
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1980	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1976	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1971	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

APNs 462-182-018 & 462-185-006
WINCHESTER, CA 92596

No Addresses Found

FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
<u>FINCH</u>			
2005	pg. A12	EDR Digital Archive	
2000	pg. A15	EDR Digital Archive	
1995	pg. A18	EDR Digital Archive	
1992	pg. A20	EDR Digital Archive	
1985	pg. A23	Haines Criss-Cross Directory	
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1976	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINCH ST

2017	pg. A1	EDR Digital Archive
2014	pg. A4	EDR Digital Archive
2010	pg. A8	EDR Digital Archive

HADDOCK ST

2017	pg. A2	EDR Digital Archive	
2014	pg. A5	EDR Digital Archive	
2010	pg. A9	EDR Digital Archive	
2005	pg. A13	EDR Digital Archive	
2000	pg. A16	EDR Digital Archive	
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	pg. A21	EDR Digital Archive	
1985	pg. A24	Haines Criss-Cross Directory	
1985	pg. A25	Haines Criss-Cross Directory	
1980	pg. A29	Haines Criss-Cross Directory	
1976	pg. A33	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source

WILLARD ST

2017	-	EDR Digital Archive	Target and Adjoining not listed in Source
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FINDINGS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
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2010	pg. A10	EDR Digital Archive	
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1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
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1980	pg. A30	Haines Criss-Cross Directory	
1976	pg. A34	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source

WINCHESTER RD

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2005	pg. A14	EDR Digital Archive	
2000	pg. A17	EDR Digital Archive	
1995	pg. A19	EDR Digital Archive	
1992	pg. A22	EDR Digital Archive	
1985	pg. A27	Haines Criss-Cross Directory	
1985	pg. A28	Haines Criss-Cross Directory	
1980	pg. A31	Haines Criss-Cross Directory	
1980	pg. A32	Haines Criss-Cross Directory	
1976	pg. A35	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source

City Directory Images

FINCH ST 2017

33180 RACHELS VINEYARD

HADDOCK ST 2017

32665 VALLEYWIDE RECREATION WINCHESTER DOM
32870 CERDA, APRIL
32876 DARBY, DANZELL
32882 CLABORN, JEFF P
32890 VEDENHAUPT, SHANE
32902 RAISCH, KEITH B

WINCHESTER RD 2017

27185 PETTIT, MELTON E
28314 WINCHESTER INN
28340 WINCHESTER RANCH MARKETS
28369 MICRO TIRE CO
28535 WINCHESTER STORE
28750 CORONADO, JR
28760 MCPHAIL, WENDY J
28800 CALL, KATHRYN A
28920 FRAGOSO, GERARDO G
31755 WEST COAST TURF WINCHESTER
31831 STRINGER, KIM J
31885 TRISTATE MATERIALS
33900 ABELL, COURTNEY
ACHESON, GERARD T
34155 JAESCHKE, DEAN
LIESMAN, WILLIAM R
34165 LECH, PATTI

FINCH ST 2014

32866 HANSEN, FRED A
33065 LEON, VERONICA
33066 HOSTETLER, JOSHUA
33078 AVALOS, MARIA
33098 RODRIGUEZ, RAMON
33118 AMATO, LAURA
33140 RODRIGUEZ, ROSARIO
33145 MELCHOR, JOSE
33160 WOODWORTH, LEE
33180 DUNPHY, ERIC A
RACHELS VINEYARD
33190 RAMOS, GUADALUPE
33195 GARCIA, MATIN
33205 MALFAVON, REYNALDO
33210 ROMANELLO, ALEJANDRO
33215 LINDSLEY, KRISTY

HADDOCK ST 2014

32665 VALLEYWIDE RECREATION WINCHESTER DOM
32870 ESPARZA, MANUEL
32876 TAYLOR, DARBY
32882 OCCUPANT UNKNOWN,
32902 RAISCH, KEITH B
33025 BEDOLLA, FEDERICO T
33097 SOTO, JOSE
33175 HASTREITER, LASTENIA

WILLARD ST 2014

32827 MATZIE, JEANINE M
32905 URIARTE, TAMARA
32940 MADRID, ABEL
33197 LOZANO, MARIA E
33203 CARMONA, JOSE S
33207 NOSA, CRESENCIANO A
33213 CRUZ, GLENDY
33214 LOZA, LORENA
33218 BELL, KENNETH S
33240 VARGAS, HILDA

WINCHESTER RD 2014

27185	PETTIT, MELTON E
27255	OCCUPANT UNKNOWN,
28050	SCHEMBRI, ROBYN J
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28325	CHRIS BURGER CHRIS BURGERS
28340	WINCHESTER RANCH MARKETS
28369	MICRO TIRE CO
28384	NATURES BLISS
28535	WINCHESTER STORE
28543	WINCHESTER FEED
28750	CORONADO, JR
28760	RIVER, CRYSTAL
28770	CORONADO, JUANITA
28790	CUPPET, DEANNA CUPPETT, RICHARD M
28800	CALL, KATHRYN A
28850	WEAVER, TIFFANY
28920	PARTRIDGE, NICOLE
28975	DIXON, CONNIE
30093	VANHORN, WAYNE A
31755	WEST COAST TURF
31831	STRINGER, KIM J
31871	PEFLEY, COLENE
31885	TRI STATE MATERIALS
31891	HOLMES, KATHRYN
33900	ABELL, COURTNEY ACHESON, GERARD T
34155	JAESCHKE, DEAN LIESMAN, WILLIAM R
34165	GARCIA, ALEJANDRO A

FINCH ST 2010

33055 VILLELA, MARTIN
33065 LEON, CARMELO O
33078 MARTINEZ, MARIA
33108 RODRIGUEZ, RAMON
33118 AMATO, SABRINA
33119 ROSALES, MIGUEL L
33140 RODRIGUEZ, ROSARIO
33185 RAMIREZ, HILDA
33190 RAMOS, GUADALUPE
33205 MALFAVON, REYNALDO
33210 ROMANELLO, MARIO A

HADDOCK ST 2010

32665 VALLEYWIDE RECREATION
32870 RITCHEY, JOHN E
32876 OCCUPANT UNKNOWN,
32882 CLABORN, JEFF P
32896 LYNN, MARIAN
32902 HORECKA JAMES
OCCUPANT UNKNOWN,
33109 BRADY, BARBARA
33121 MORENTIN, ENRIQUE R
33175 LOPEZ, LYDIA

WILLARD ST 2010

32827 MATZIE, JEANIENE
33090 FRAGOSO, JOSE
33099 SOTO, ANTONIO N
33213 TORRES, CARLOS
33218 BELL, KENNETH S
33240 VARGAS, HILDA

WINCHESTER RD 2010

27185 PETTIT, MELTON E
27383 RHEINGANS, CARL J
28314 WINCHESTER INN
28369 O K EQUINE EQUIPMENT
28384 WINCHESTER RENTALS
28453 US POST OFFICE
28481 ELFEGA, ENRIQUEZ
28538 FLAME HOUSE
28539 LAS PALMAS TACO SHOP
LESLIES TACO SHOP
28543 SHAPEABILITIES
28750 CORONADO, MARTIN
28751 WINCHESTER SCHOOL
28760 RIVER, CRYSTAL
28770 CORONADO, JUANITA
28790 CUPPETT, DEANNA
MILHOLLAND, HELEN J
28800 CALL, KATHRYN A
28850 DRYDEN, JENNIFER
28920 PARTRIDGE, NICOLE
28975 LESLIE, STEVEN C
30093 VANHORN, WAYNE A
30163 WESSELINK, LEO F
30193 RAMIREZ, ROSA
31755 WEST COAST TURF
31831 STRINGER, CHARLES R
31871 OCCUPANT UNKNOWN,
31885 TRI STATE MATERIALS
33900 PETTREY, KEVIN
34155 JAESCHKE, DEAN
LIESMAN, WILLIAM R
34165 COYOTE RENTALS & SALES INC
GARCIA, ALEJANDRO A
UHAUL CO

FINCH 2005

33065 LEON, LIBORIO
33118 AMBROSE, ROBERT U
33145 GONZALEZ, GUADALUPE
33215 ACUNA, RAFAELA

HADDOCK ST 2005

32665 COOKS COUNTRY CRAFTS
PUGA, MARTHA
VALLEYWIDE RECREATION WINCHESTER PAR
32870 REVOIR, KEITH D
32876 LINDSTROM, JASON
32882 CHAFFEE, PAIGE E
32890 ARRIAGA, SUSANA L
32896 STERNOD, TROY
32902 HORECKA, JAMES E
JAMES HORECKA ARCHITECT AIA
33109 BRADY, BARBARA
33110 BALDRIDGE, LARRY
33112 ECHEVARRIA, GEORGE
33124 ELROD, JEFFREY R
33139 LOVENBURG, DARWIN K
33175 MCCONVILLE, ROBERT D

WINCHESTER RD 2005

28535 WINCHESTER STORE
28539 QUTAMI, AHMAD F
28543 WINCHESTER FEED
28599 DORAN, IMOGENE A
28604 MURILLOS POTTERY
PENA, ANTONIO C
28750 CORONADO, MARTIN
28751 HEMET UNIFIED SCHOOL DISTRICT
28760 OCCUPANT UNKNOWN,
28770 CORONADO, JUANITA
28790 EISAS, RHIANNON L
MILHOLLAND, HELEN J
28800 BILES, BILLY G
28850 FARMER, JEFFERY E
28920 FRAGOSO, GERARDO
28975 LESLIE, STEVEN C
30093 VAN HORNS MACHINE WORKS
VANHORN, WAYNE A
30163 WESSELINK, LEO F
30193 RAMIREZ, ROSA
31755 WEST COAST TURFRL
31831 STRINGER, CHARLES R
34155 JAESCHKE, DEAN
34165 CORTEZ, TOMAS N

FINCH 2000

33055 CASTILLO, ARCELIA
33066 JOHNSON, SANDRA
33078 ORGAN, TIMOTHY K
33088 MCCUTCHEON, LISA
WINCHESTER TOWING
33118 AMBROSE, ROBERT

HADDOCK ST 2000

32876 ELLER, RANDY
32902 HORECKA JAMES ARCHITECT AIA
33110 BALDRIDGE, LARRY
33121 CARL, WILLIAM A
33139 LOVENBURG, DARWIN K

WINCHESTER RD 2000

28535 WINCHESTER STORE
28539 MASOTTOS ITALIAN RESTAURANT & DELI
28543 WINCHESTER FEED
28599 DORAN, IMOGINE
28604 HANNAFORD, K
28750 CORONADOJR, MARTIN
28800 BILES, BILLY
28850 ACKERMAN, STEVEN P
28920 FRAGOSO, GERARDO
28975 LESLIE, ROBERT M
30093 VANHORN, WAYNE
30193 RAMIREZ, ROSA
31831 STRINGER, CHARLES
34155 JACOBY, EDWARD C
34165 CORTEZ, TOMAS N

FINCH 1995

33055 CASTILLO, ARCELIA
33066 JOHNSON, SANDRA
33078 KRUPSKY, EDWARD E
33088 WINCHESTER TOWING
33145 ANGERT, PETER
33185 CEJA, B
33200 RAMIREZ, S
33215 DICKEY, JAMES R

WINCHESTER RD 1995

28220 WINCHESTER INN PRODUCE
28314 WINCHESTER INN
28340 WINCHESTER MINI MART & DELI
28369 O K ENVIRONMENTAL EQUIPMENT
28384 BIG R & LITTLE T
28453 US POST OFFICE
28535 WINCHESTER STORE
28539 MASOTTOS ITALIAN RESTAURANT
28543 WINCHESTER FEED
28604 LEISURE TIME BUNK BEDS & FUTON
28751 WINCHESTER ELEMENTARY SCHOOL
28790 HARBRIDGE, DANA M
33900 SMITH, KERRY D

FINCH 1992

33055 CASTILLO, ARCELIA
33066 JOHNSON, SANDRA
33078 KRUPSKY, EDWARD E
33088 WINCHESTER TOWING
33118 MALONE, BRUCE
33119 BEBENSEE, DUANE
33145 ANGERT, PETER
33160 COWDERY, ART
33180 DUNPHY, RICK
33185 CEJA, B
33200 RAMIREZ, S
33215 DICKEY, JAMES R
33230 BELTRAN, EDUARDO

HADDOCK ST 1992

32876 ELLER, RANDY
32902 HORECKA, JAMES

WINCHESTER RD 1992

28212 WINCHESTER INN PRD
28314 WINCHESTER INN
28325 CHRIS BURGERS
28340 WINCHESTER MINI MRT
28369 O K TIRE WAREHOUSE
28384 BIG R&LITTLE T
28453 US POSTAL SERV
28532 RUNTZEL, J T
28535 WINCHESTER STORE
28539 MASOTTOS ITAL REST
28543 WINCHESTER FEED
28599 DORAN, JESS E
28604 LEISURE TIME BEDS
SAUER, PAUL
28750 CORONADO, MARTIN
28751 HEMET SC WINCHESTER
28800 BILES, BILLY
28975 MARQUEZ, B
30033 SANCHEZ, JUAN
30093 VANHORN, WAYNE
30163 NUNEZ, S
30193 RAMIREZ, ROSA
31755 WARRENS TURF NRSRY
31851 DOMENIGONI, ANDY
34155 CASE, MICHAEL
34165 CORTEZ, ANTONIO

FINCH 1985

FINCH 92396 WINCHESTER

33086	JOHNSON SANDRA	926-4291 +5
33078	KRUPSKY EDW E	926-1735 2
33088	SANCHEZ LAZARRO	926-9112 4
33098	XXXX	00
33118	HEMET PIPELINE INC	926-3879 +5
	MALONE L S	926-3879 +5
33160	COWDERY ART	926-9180 +5
33180	DUNPHY RICK	926-4269 3
33185	ROUTLEDGE A	926-2870 +5
33230	LOUDERBACK STEVE	926-2406 1
33240	ACKERMAN MARK	926-1306
★	1 BUS	10 RES 5 NEW

HADDOCK ST 1985

HADDOCK 92396
WINCHESTER

33025	COMEY OWEN J	926-4130	0
33040	FOGERTY J B	926-1628	+5
33059	XXXX	00	
33080	WESTMORELAND C W	926-2509	9
33090	MCKIM LEWIS	926-1006	9
33097	NEAL JAS	926-9615	+5
	NEAL R	926-4561	3

MAY NOT BE KEYPUNCHED ENTERED INTO A COMPUTER

HADDOCK ST 1985

	HADDOCK		92396 CONT.	
	33109	XXXX	00	18
	33121	CARL WM A	926-4969 +5	
7	33124	COLEMAN JAS T	926-2530 0	18
3	•	0 BUS	10 RES	18
			3 NEW	18

WILLARD ST 1985

WILLARD 92396
WINCHESTER

32905	XXXX		00
33030	SIERRAS V L		926-2860
33050	SCHWARTZ JOYCE		926-1431 0
33081	RANGEL RAMON		926-4289 3
	★ 1 BUS	3 RES	0 NEW

WINCHESTER RD 1985

WINCHESTER RD 92396
WINCHESTER

28090	PATRICK BOYD	926-4820	3
28091	XXXX	00	
28275	PREECE HAY&FEED	926-4688	4
28314	WINCHESTER INN	926-9924	+5
28316	VONEUW PAUL	926-3611	4
28340	WINCHESTER GAS&GROC	926-1442	4

WINCHESTER RD 1985

WINCHESTER RD		92396 CONT..	
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28479	XXXX	00	
28481	BIDART A	926-2384	
28532	XXXX	00	
28535	WINCHESTER FEED STR	926-3090	4
	WINCHESTER STORE	926-1682	7
28539	DONS PLACE	926-9990	6
28599	DORAN JESS E	926-1995	3
28604	HEROLD BRIAN	926-9659	+5
28751	HEMET SC WINCHESTER	926-1547	3
28800	BILES KATHRYN	926-3655	+5
28850	WINCHESTER STCK FRM	926-2969	4
28975	GATES THOS	926-3398	0
30093	VANHORN WAYNE	926-2544	+5
	VANHORNS MACH WORKS	926-2404	1
30880	CUPP VICTOR	926-9333	4
31851	DOMENIGONI ANDY	926-1763	1
32983	XXXX	00	
33187	XXXX	00	
33365	XXXX	00	
33890	BOX E C	926-3927	0
33900	HOMAN CECIL	926-2576	1
34155	MULLIGAN EUGENE	926-9146	4
	MULLIGAN EUGENE A	926-2865	1
34165	CORTEZ APOLONIO	926-3208	+5
	10 BUS	24 RES	5 NEW

HADDOCK ST 1980

HADDOCK 92396

WINCHESTER

33025	COMEY OWEN J	926-4130 +0
33040	MEADE DAROLD L	926-1628 +0
33059	CADY FRED	926-1476 7
33080	WESTMORELAND C W	926-2509 9
33090	MCKIM LEWIS	926-1006 9
33109	RIGDON WILSON E	926-2790 9
33121	RIGDON LAWSON	926-2038 6
33124	COLEMAN JAS T	926-2530 +0
★	0 BUS	8 RES
		3 NEW

WILLARD ST 1980

WILLARD 92396
WINCHESTER

33030	SIERRAS V L	926-2860	5
33050	SCHWARTZ JOYCE	926-1431	+0
★	0 BUS	2 RES	1 NEW

3
6

WINCHESTER RD 1980

WINCHESTER RD 92396

WINCHESTER

28091	XXXX	00	
28275★	ANZA AG CHEM INC	926-2619	4
28314★	WINCHESTER INN	926-9924	9
28316	VON EUW PAUL	926-3611	9
28349	HEROLD DENNYS	926-1061	8
28369★	AUZENNES GARAGE DRS	926-1209	7
28401	XXXX	00	
28453	POWELSON SCOTT	926-2751	6
28481	BIDART A	926-2384	

D IN WRITING BY HAINES & CO. INC

WINCHESTER RD 1980

RIVE

Target Street	Cross Street	Source
.. WINCHESTER RD		92396 CONT..
28532	XXXX	00
28535★	WINCHESTER STORE	926-1682 7
28539★	DONS PLACE	926-9990 6
28599	DORAN JESS E	926-1995
28604	HELMAN JAS R	926-2746 5
28975	GATES THOS	926-3398 +0
33365	LOWE ROBT F	926-3929 +0
33890★	BOX E C	926-3927 +0
★	6 BUS	11 RES
		3 NEW

HADDOCK ST 1976

HADDOCK 92396 WINCHESTER

33040	PROFFITT M A	926-2067+6
33090	MCKIM LEWIS C	926-1006
33097	MORENO MANUEL	926-2718+6
33121	RIGDON LAWSON	926-2038+6
*	0 BUS 4 RES	3 NEW

WILLARD ST 1976

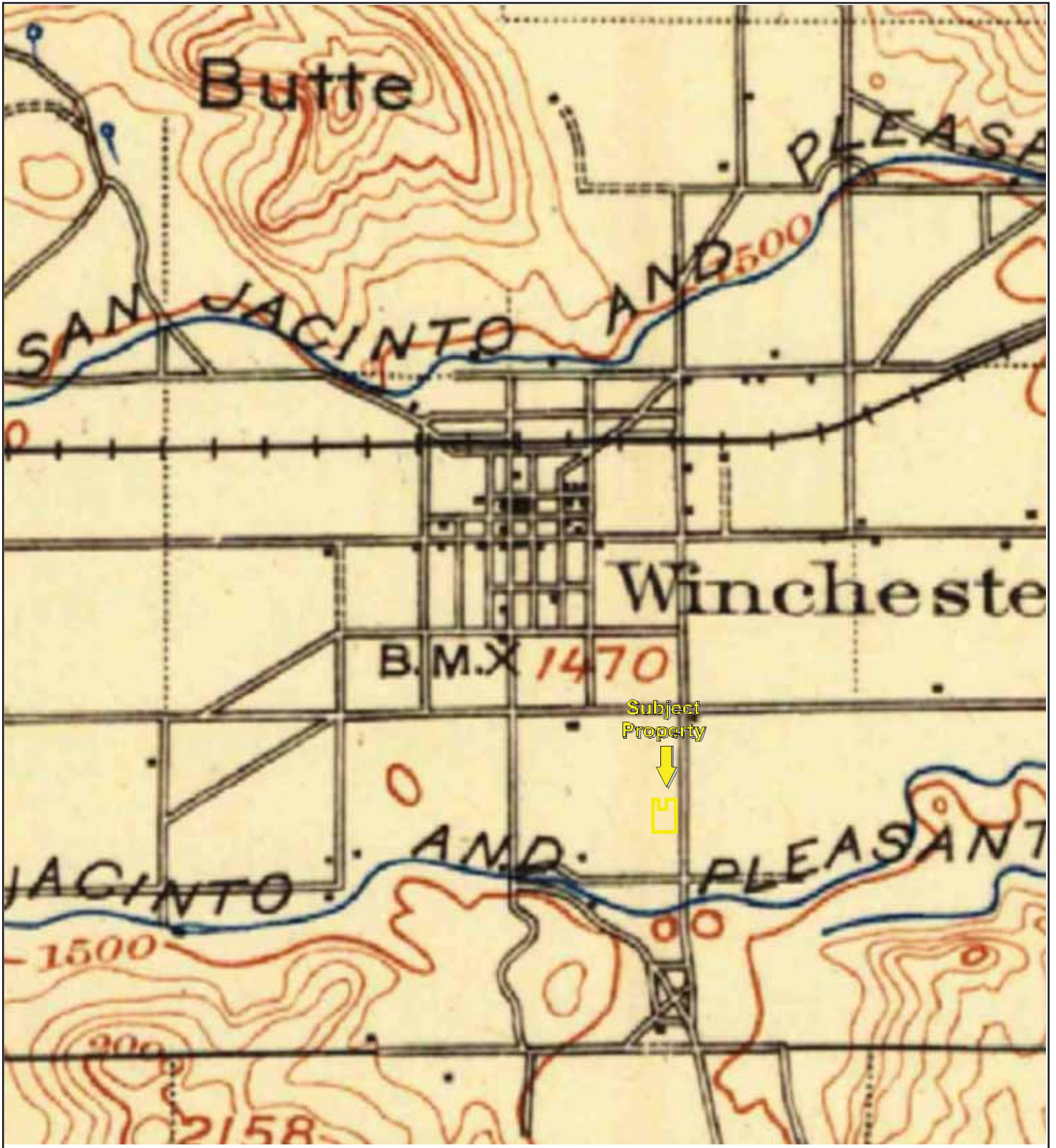
WILLARD 92396 WINCHESTER

33030	SIERRAS	V L		926-2860	5
*	0	BUS	1	RES	0
				NEW	

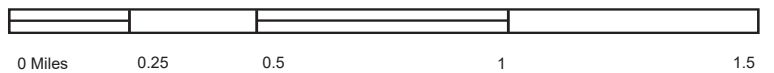
WINCHESTER RD 1976

WINCHESTER RD 92396 WINCHESTER

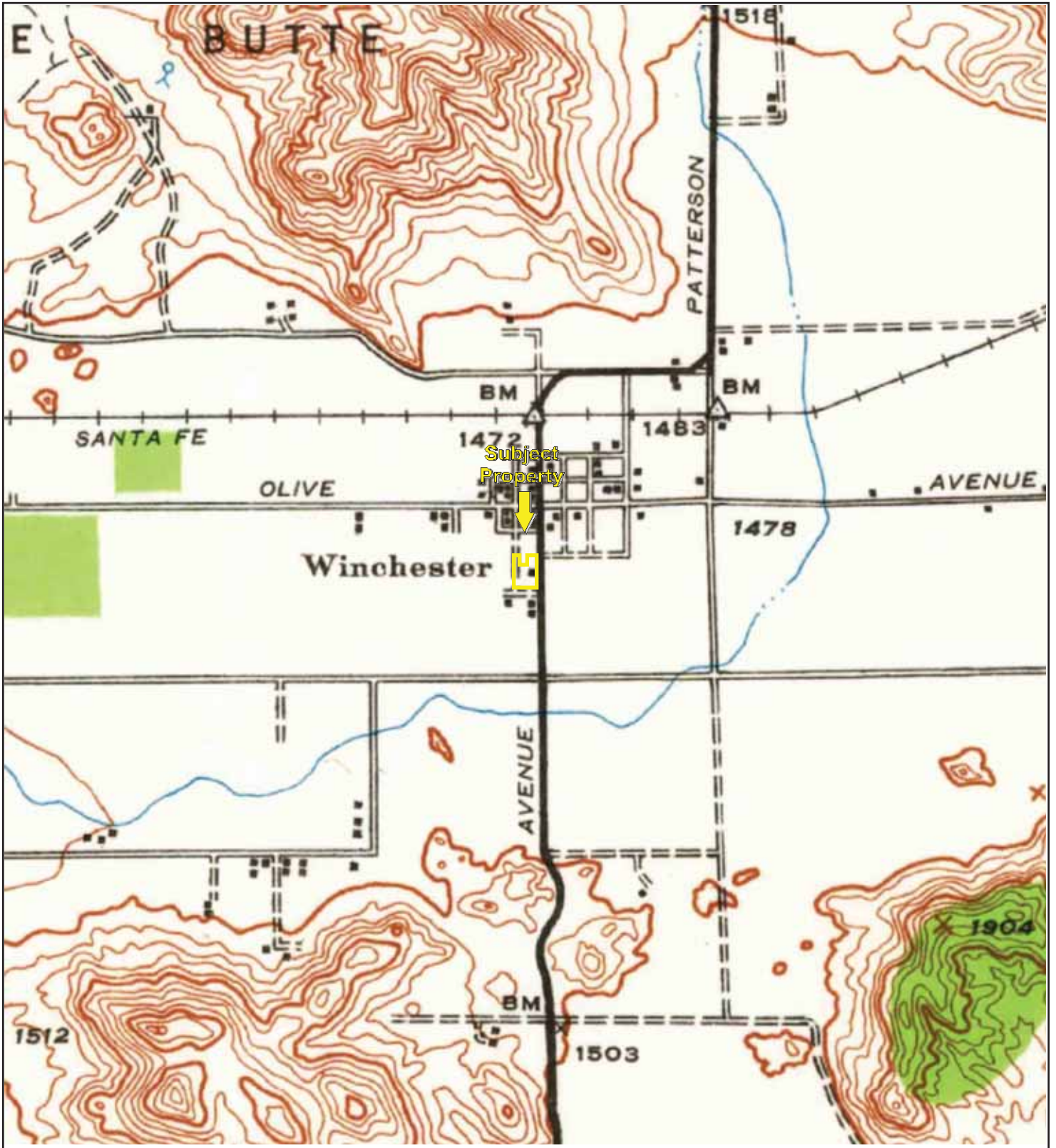
28275*	AVZA AG CHEM INC	926-2619	4
28314*	WINCHESTER INN	926-9958	
28316	LARKIN VINCENT JR	926-1011	
28349	XXXX	00	
28401	TOBIN M C	926-1048	
28453	POWELSON SCOTT	926-2751+6	
28481	BIDART A	926-2384	
28532	XXXX	00	
28535*	STEVENS MKT	926-1682	
28539*	DONS PLACE	926-9990+6	
28599	DORAN JESS E	926-1995	
28604	HELMAN JAS R	926-2746	5
NO #	*DAIRY FRESH PRODCTS	926-1415	4
*	5 BUS	8 RES	2 NEW



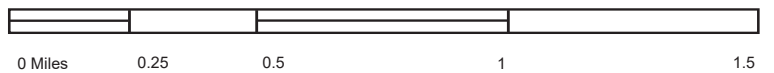
TP, Elsinore, 1901, 30-minute



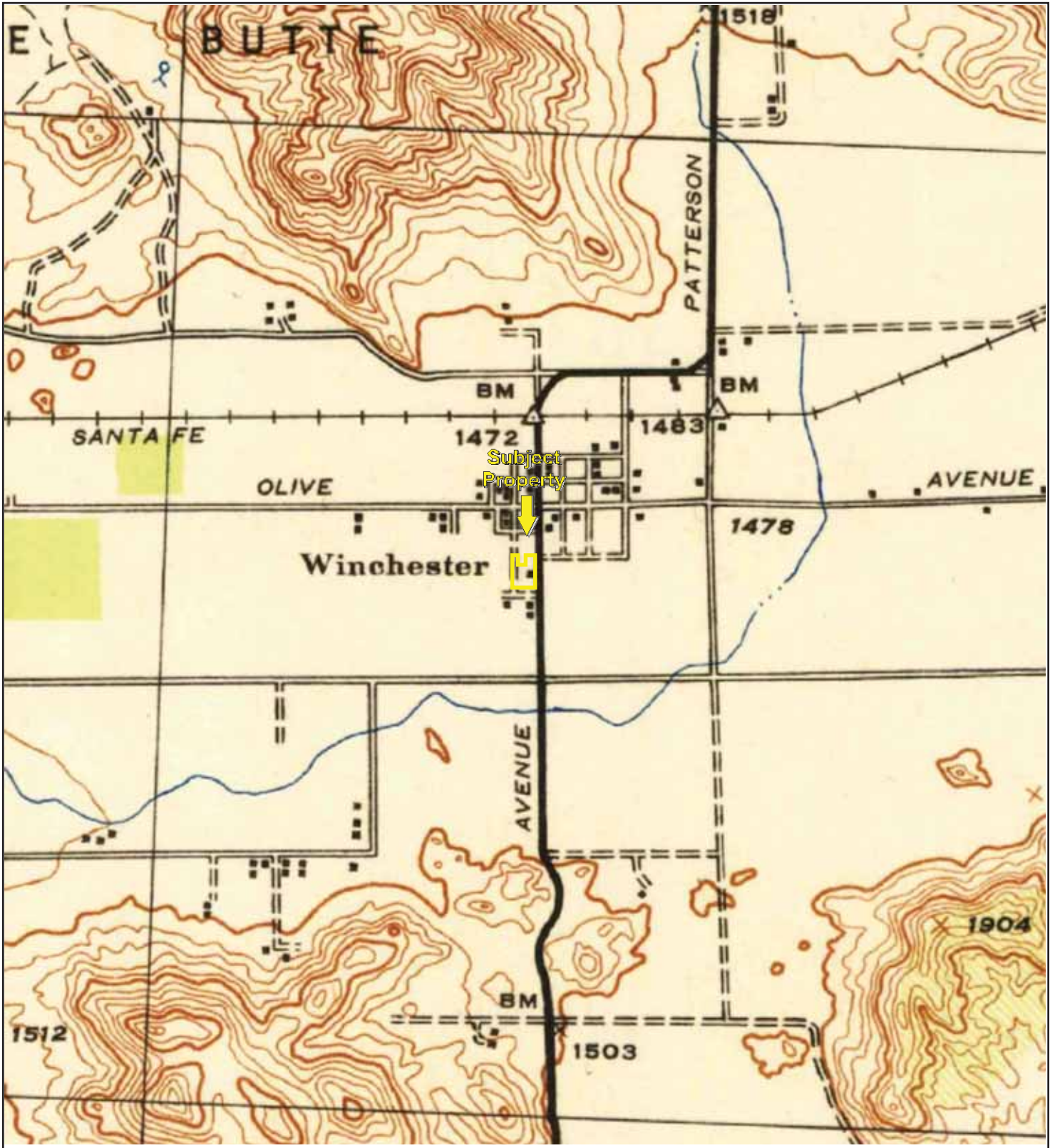
Key: Subject Property 



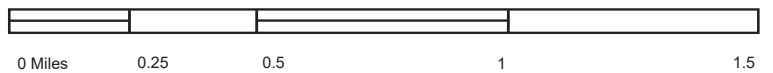
TP, Murrieta, 1942, 15-minute



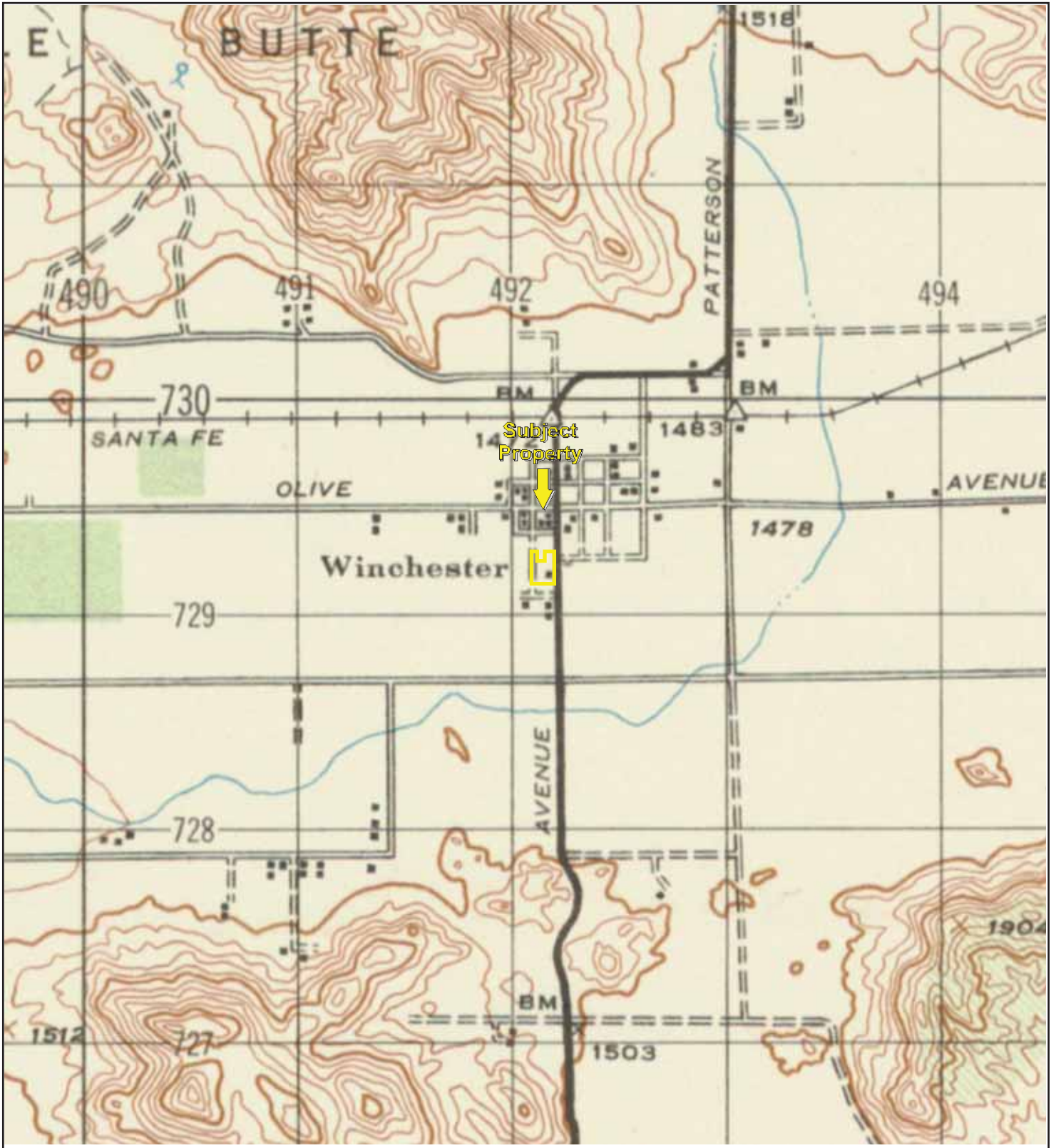
Key: Subject Property 



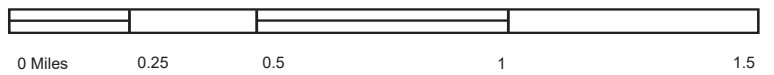
TP, Murrieta, 1943, 15-minute



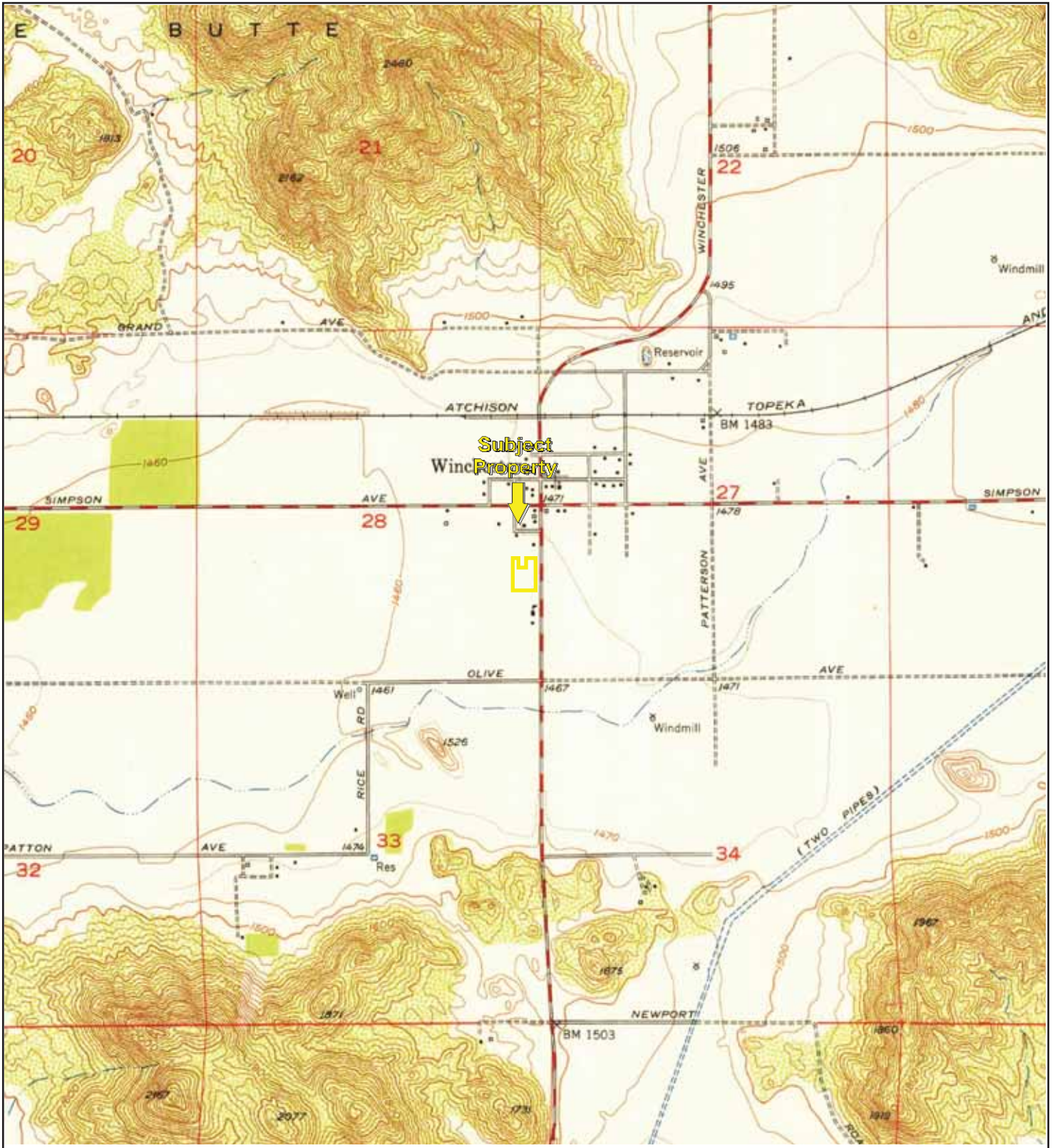
Key: Subject Property 



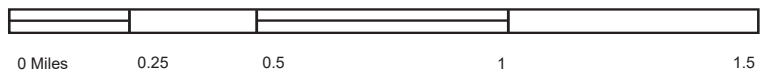
TP, MURRIETA, 1947, 15-minute



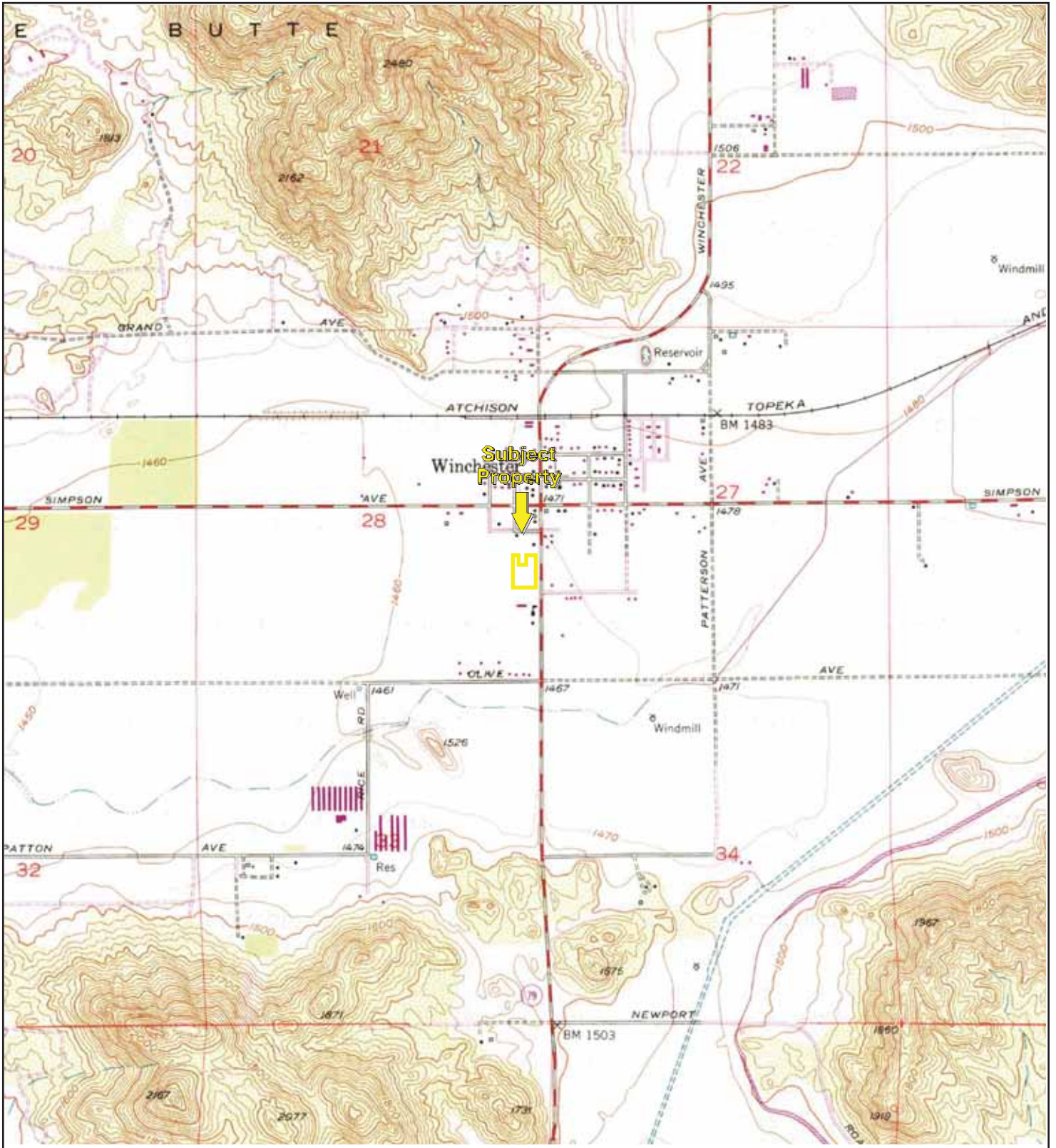
Key: Subject Property 



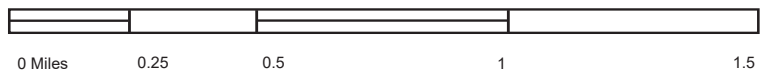
TP, Winchester, 1953, 7.5-minute



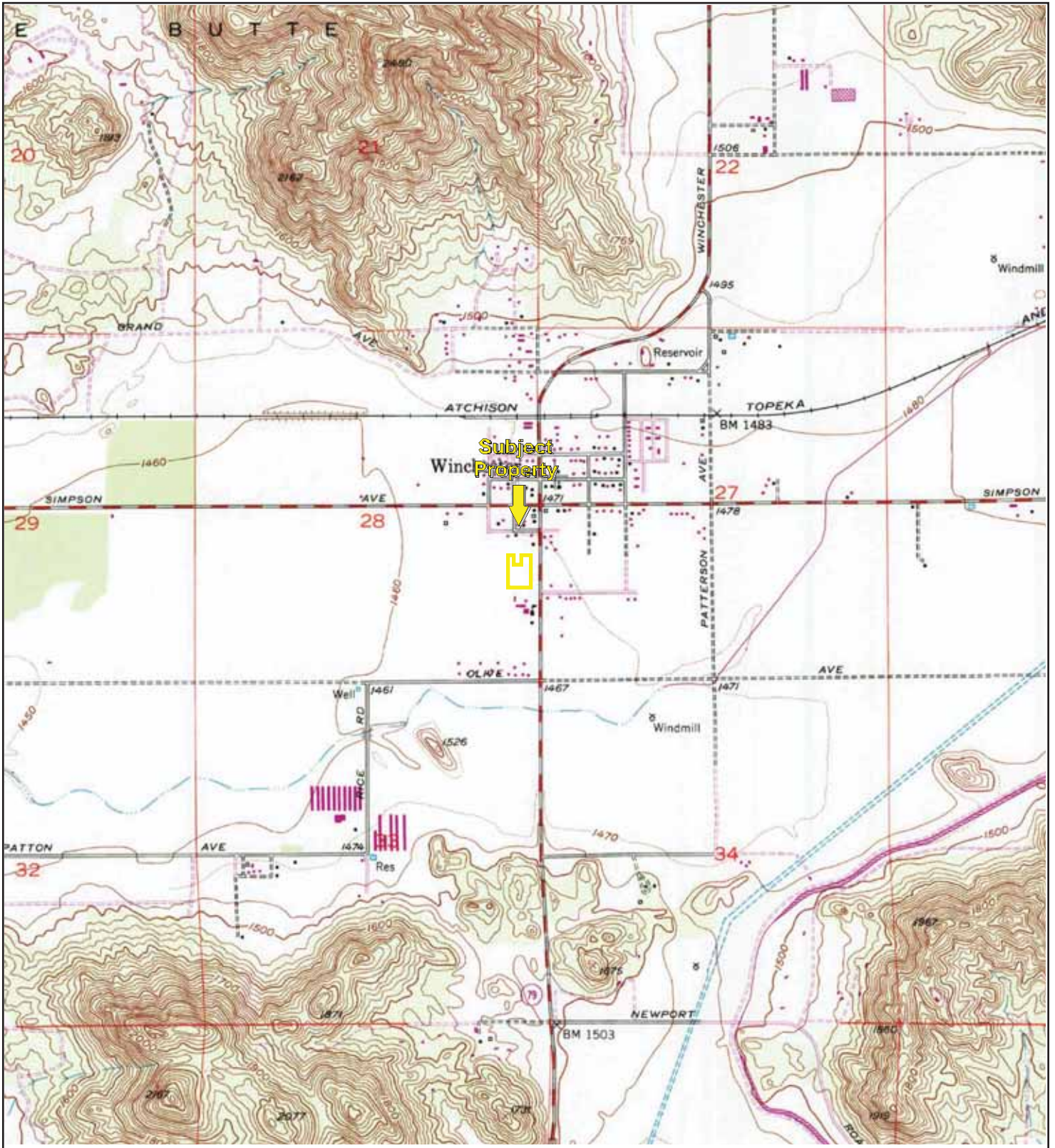
Key: Subject Property



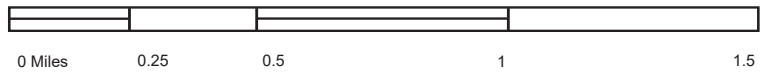
TP, Winchester, 1973, 7.5-minute



Key: Subject Property



TP, Winchester, 1979, 7.5-minute



Key: Subject Property



County of Riverside
DEPARTMENT OF ENVIRONMENTAL HEALTH

KEITH JONES, DIRECTOR

Incomplete Records Request Notice

March 31, 2021

Request No: 50519

PARTNER
25172 West Pose Dr.
Hemet, CA 92544
Attn: Sheryl Amezcua

Request Date: 3/29/2021

Re: APNs: 462-182-018 & 462-185-006, Winchester

We have received your request for records however a search of our records cannot be conducted based on the information provided.

Please reference a specific site address(s) of inquiry and resubmit the records request.

The Hazardous Materials Management Division is unable to provide information about sites based on APN's or similar geographic site data.

Please direct questions or correspondence to:

Department of Environmental Health
Hazardous Materials Management Division
4065 County Circle Dr., Rm. 104
P.O. Box 7909
Riverside, CA 92513-7909
Attention: Records Management
Telephone: 951-358-5055
Fax: 951-358-5017

You may also visit our website at www.rivcoeh.org

Note: Records for disclosure information of the cities of Corona 951-736-2220, and Riverside 951-826-5737 will need to be directed to the City Fire Department.

2275 S. Main Street, Ste. 204
Corona, CA 92882
(951) 273-9143
(951) 520-8319 Fax

800 S. Sanderson Avenue, Ste. 102
Hemet, CA 92545
(951) 766-6524
(951) 791-1778 Fax

47950 Arabia Street, Ste. A
Indio, CA 92201
(760) 863-8976
(760) 863-8303 Fax

4065 County Circle Dr., Ste. 104
Riverside, CA 92503
(951) 358-5055
(951) 358-5342 Fax

3880 Lemon Street, Ste. 200
Riverside, CA 92501
(951) 955-8980
(951) 955-8988 Fax



County of Riverside
DEPARTMENT OF ENVIRONMENTAL HEALTH

KEITH JONES, DIRECTOR

March 31, 2021

Due to the ongoing COVID-19 national state of emergency, and Orders by the Riverside County Health Officer, the Riverside County Department of Environmental Health has closed all of our offices to the public and requested that our employees work remotely to support you.

Records Request services will continue to be available but please be patient with us and understand that staff is limited.

Responses will be provided **temporarily via email** and will resume to respond via US Mail once the pandemic has rectified.

During this time records will be provided in four different ways after fees are paid.

- 1) Email – Only small files no larger than ¼ inch qualify
- 2) US Mail – files that are appropriately sized for mailing will qualify
- 3) USPS / FedEx – larger files that are unable to be mailed via US Mail will be shipped at the requestor's expense
- 4) Pick Up – By appointment only

For questions please call (951) 358-5055 or visit our website for information
www.rivcoeh.org

Environmental Protection & Oversight Division
Hazardous Materials Management Branch
Attn: Records Management
P.O. Box 7909
Riverside, CA 92513-7909
Ph: (951) 358-5055
Fax (951) 358-5342

*additional fees may include costs for appt. cancellation/no show, time per service, scan/fax/mail of documents, cd/dvd

2275 S. Main Street, Ste. 204
Corona, CA 92882
(951) 273-9143
(951) 520-8319 Fax

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(951) 358-5055
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3880 Lemon Street, Ste. 200
Riverside, CA 92501
(951) 955-8980
(951) 955-8988 Fax



28604 Winchester Road

12 sites found

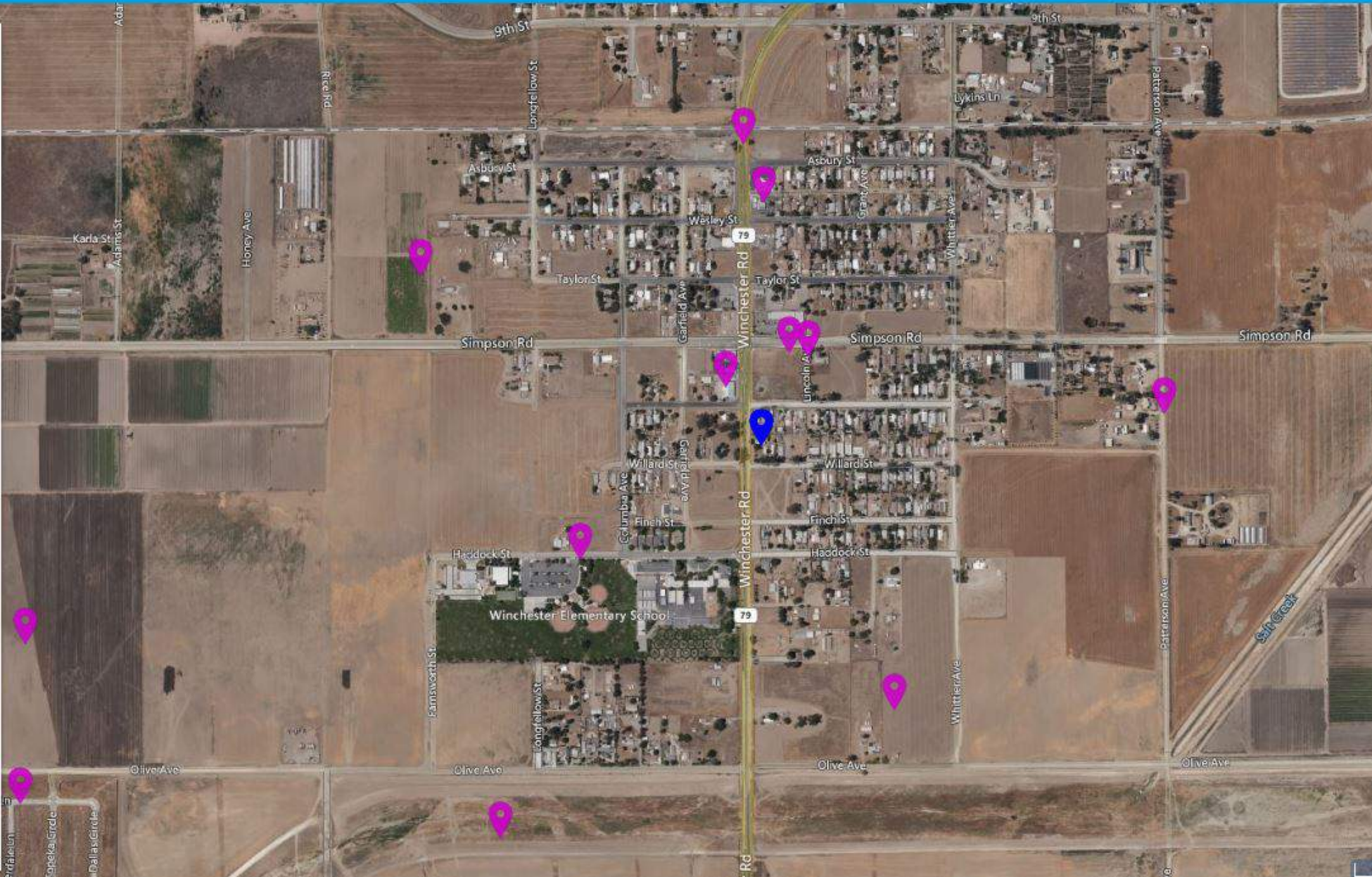
Did you mean: 28604 Winchester Rd,
Winchester, CA 92596

Crossroads North Storm Drain Facilities Improvement Project
WINCHESTER CA 92596

Creekside
OLIVE AVENUE WEST OF WINCHESTER ROAD
WINCHESTER CA 92596

Verizon Wireless: Domenigoni
33210 OLIVE AVE
WINCHESTER CA 92545

Proposed Middle Scho
NORTHEAST CORNER OF OLIVE AVENUE AND BEELER ROAD
UNINCORPORATED WINCHESTER CA 92596





Well Status and Well Type Filter

Search

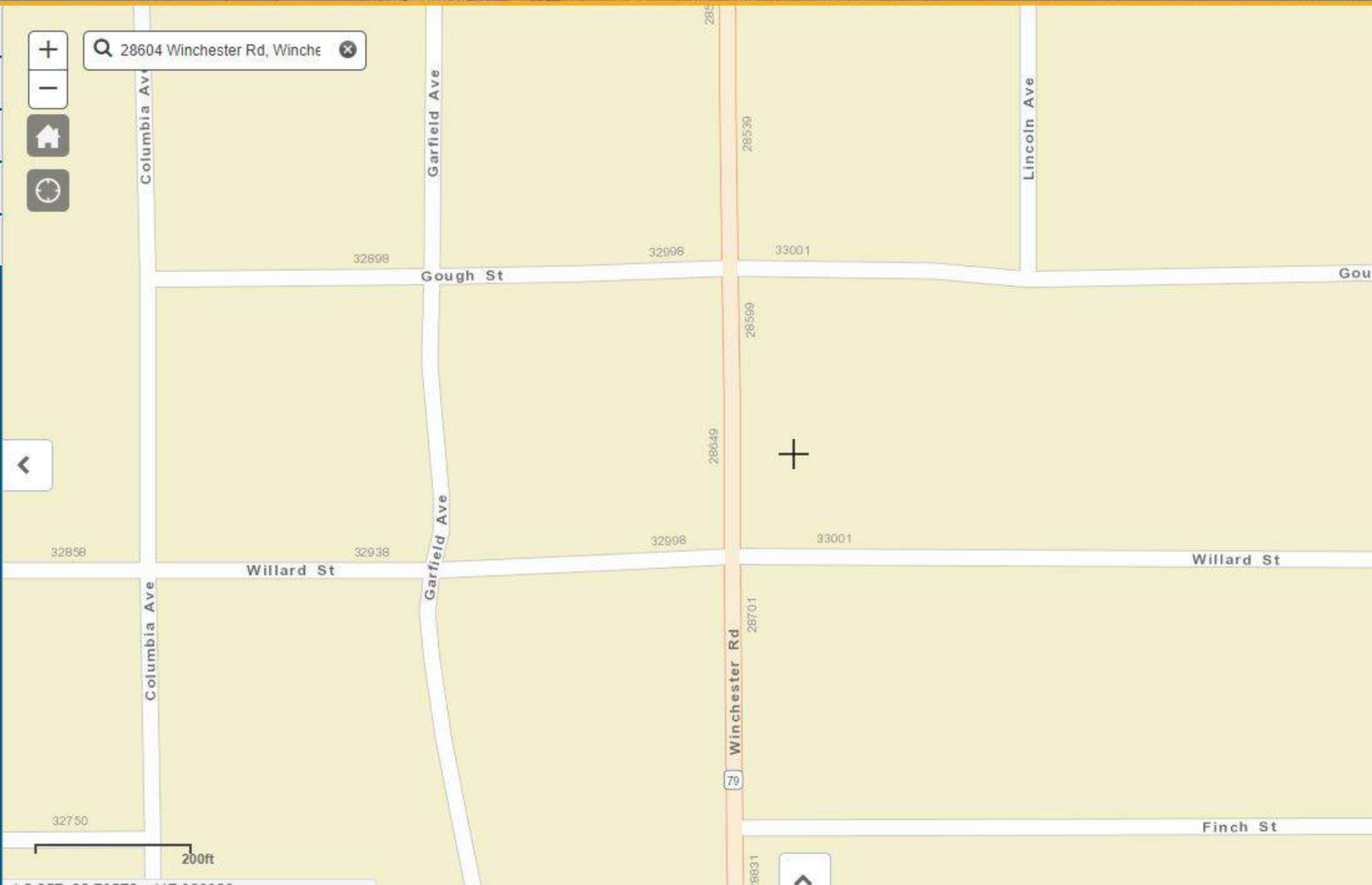
Zoom to Field

Measurement

Layers



28604 Winchester Rd, Winche



Powered by

WellSTAR

Sites and Facilities

Cleanup Sites

- Federal Superfund
- State Response
- Voluntary Cleanup
- School Cleanup
- Evaluation
- School Investigation
- Military Evaluation
- Tiered Permit
- Corrective Action
- Field Points

STATUS
All Statuses

Permitted Sites

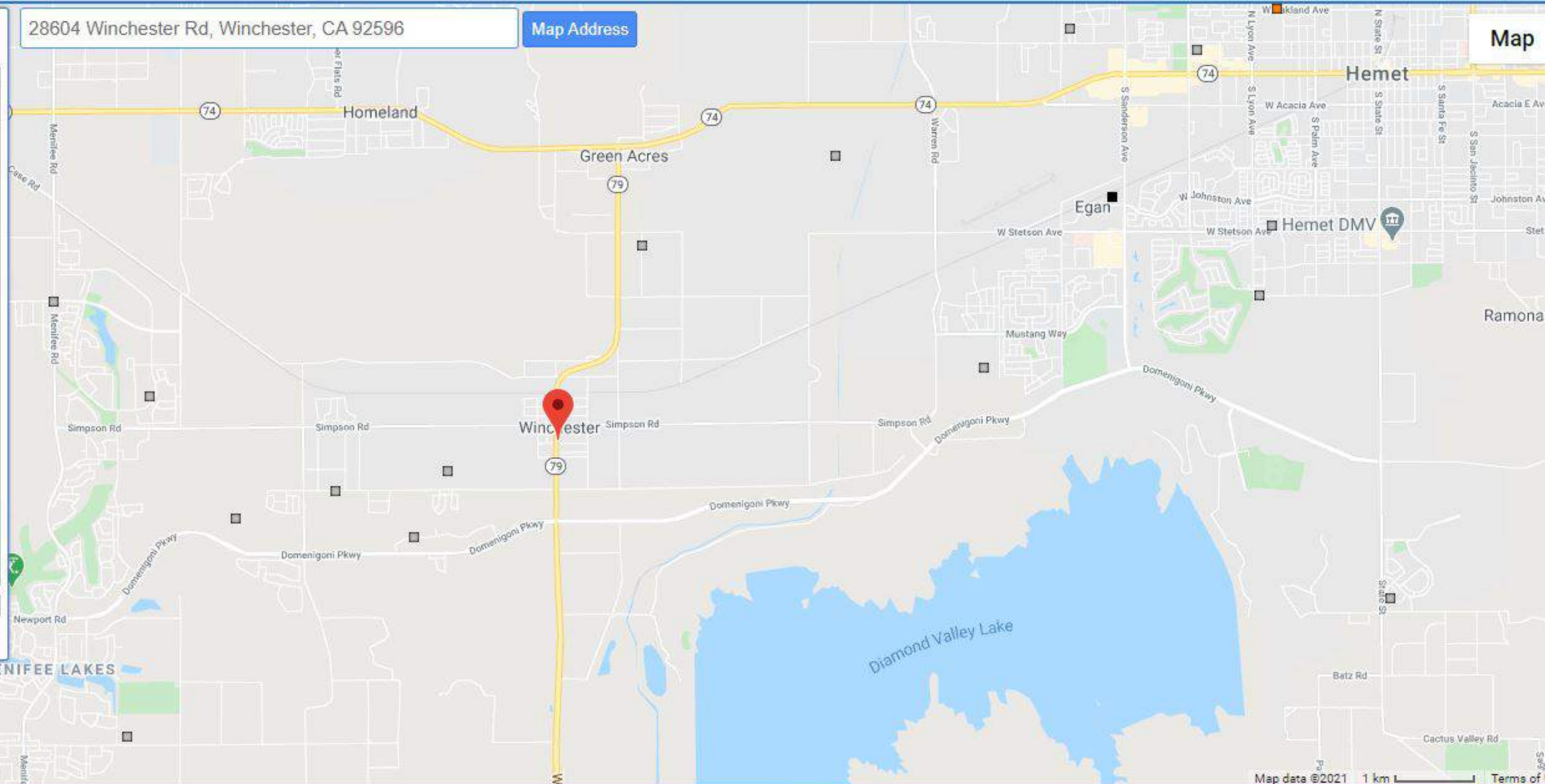
- Operating
- Post-Closure
- Non-Operating

Other Sites

GIS Layers

Tools

[TAKE A TOUR](#) [SHARE THIS MAP](#)



PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
CAWSTON ELEMENTARY SCHOOL NO. 2	NO FURTHER ACTION	SCHOOL INVESTIGATION	CAWSTON AVENUE/MENLO AVENUE	HEMET



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806



Gavin Newsom
Governor

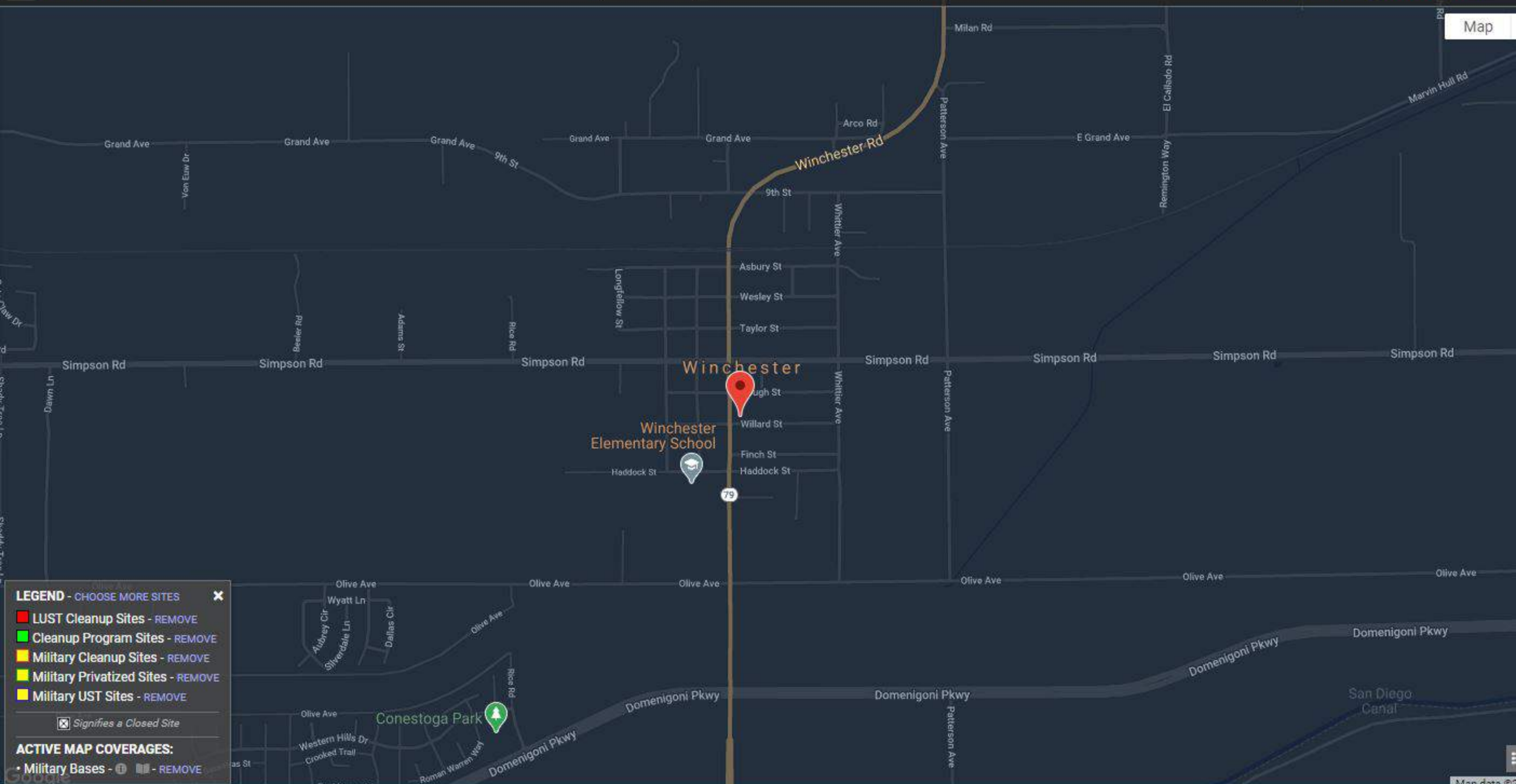
Facility Search Results

Selection Criteria:

Facility:
Search on: Physical Address
Street: Willard
City: Winchester
Status: Active and Inactive
Sort Direction: asc
Sorted By: Address
Records Found: 0

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Report Generation Date: 03/25/2021



LEGEND - CHOOSE MORE SITES

- LUST Cleanup Sites - REMOVE
- Cleanup Program Sites - REMOVE
- Military Cleanup Sites - REMOVE
- Military Privatized Sites - REMOVE
- Military UST Sites - REMOVE

Signifies a Closed Site

ACTIVE MAP COVERAGES:

- Military Bases - REMOVE



Select Search Type

Find a Facility

Name

Street

Willard Street

City

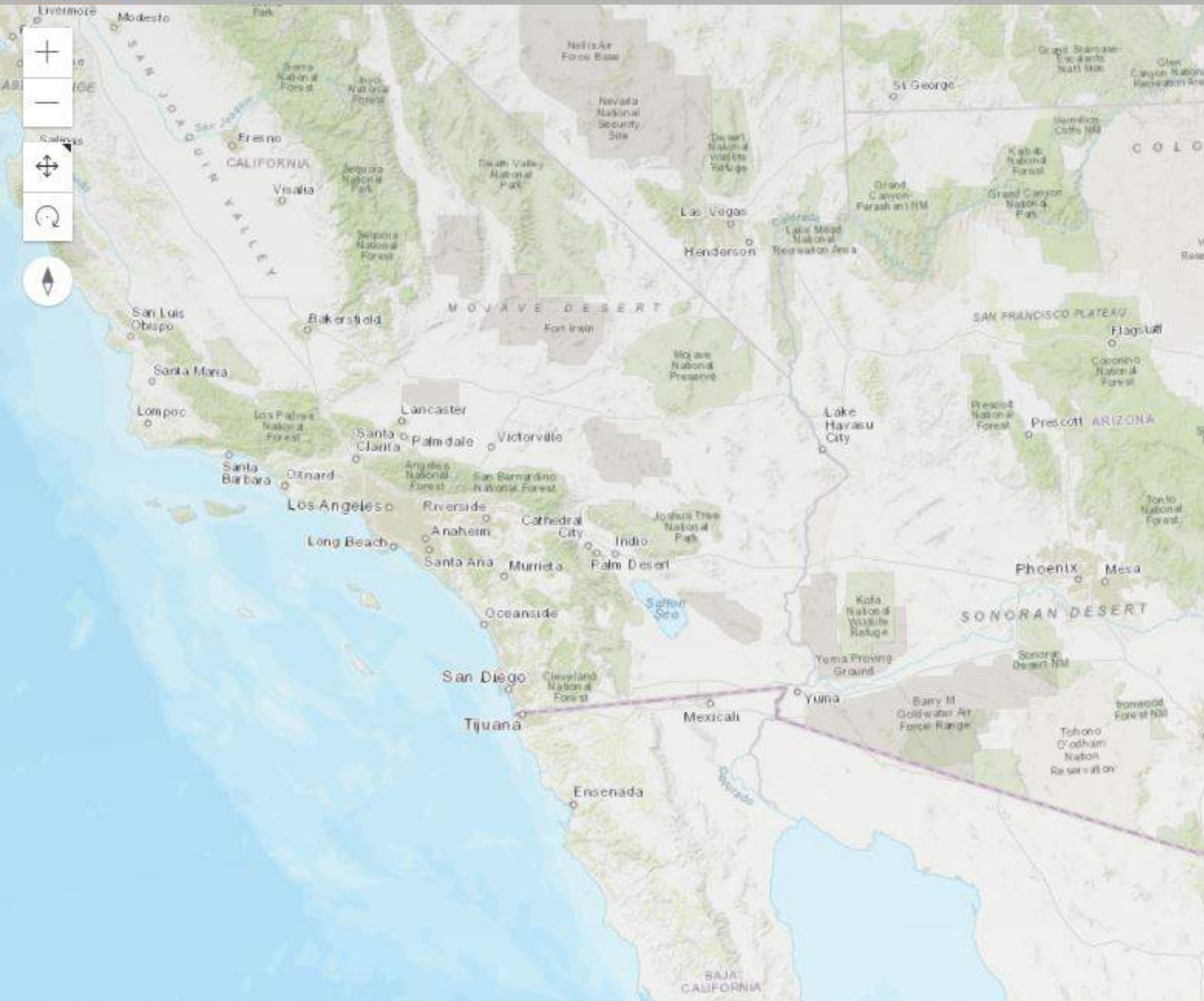
Winchester

Zip

92596

RECLAIM

TITLE V



SEARCH RESULTS

Street: Willard Street ✕

City: Winchester ✕

Zip: 92596 ✕

[Clear all Filters](#)

There are no facilities that match your search criteria. If you think this result is incorrect, call the number below



South Coast Air Quality Management District


21865 Copley Dr, Diamond Bar, CA 91765

909-396-2000

South Coast
AQMD

 **Property Overview** **, WINCHESTER, CA 92596**

Owner and Geographic Information

	Primary Owner:	Secondary Owner:		
	EMPIRE COMMUNITIES			
	Mail Address:	PO BOX 295 , TEMECULA, CA 92593-0295		
	Site Address:	, WINCHESTER, CA 92596		
	APN:	462-182-018	Lot Number:	1,2,3 Page / Grid:
	Housing Tract Number:			
Legal Description:	Lot Code: 1,2,3 Block: 38 Legal Brief Description: LOT:1,2,3 BLK:38 1.89 ACRES M/L IN LOTS 1, 2, 3 & 7 BLK 38 MB 007/011 MC MULLEN SUB			


Property Details

	Bedrooms:	0	Year Built:		Square Feet:	
	Bathrooms:	0	Garage:		Lot Size:	1.89 AC
	Total Rooms:		Fireplace:		Number of Units:	0
	Zoning:		Pool:		Use Code:	Vacant Land (General)

Sale Information

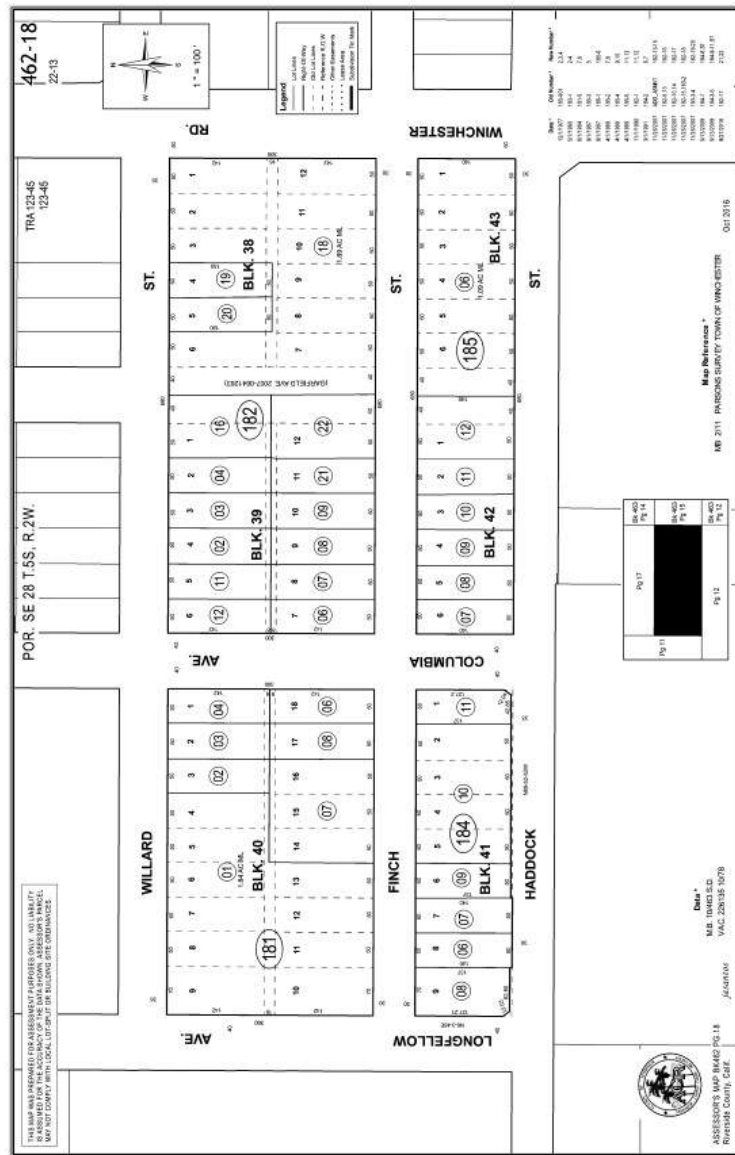
	Transfer Date:		Seller:	N/A
	Transfer Value:	\$0.00	Document#:	
	Cost/Sq Feet:			

Assessment and Taxes

	Assessed Value:	\$65,008.00	Percent Improvement:	0.00%	Homeowner Exemption:	
	Land Value:	\$65,008.00	Tax Amount:	\$770.14	Tax Rate Area:	71-045
	Improvement Value:	\$0.00	Tax Status:	Current	Tax Account ID:	462182018
	Market Improvement Value:		Market Land Value:		Tax Year:	2020
	Market Value:					



This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.



LIMITATIONS OF LIABILITY

THIS REPORT IS LIMITED IN SCOPE. IT IS NOT A COMMITMENT, ABSTRACT OF TITLE, TITLE OPINION, CERTIFICATE OF TITLE OR PRELIMINARY TITLE REPORT, NOR IS IT A REPRESENTATION OF THE STATUS OF TITLE, AND ITS ACCURACY IS NOT INSURED. WHILE THIS INFORMATION IS BELIEVED TO BE CORRECT, THE COMPANY MAKES NO REPRESENTATIONS AS TO ITS ACCURACY, DISCLAIMS ANY WARRANTIES AS TO THE REPORT, ASSUMES NO DUTIES TO YOU OR ANY THIRD PARTY, DOES NOT INTEND FOR YOU OR ANY THIRD PARTY TO RELY ON THE REPORT, AND ASSUMES NO LIABILITY FOR ANY LOSS OCCURRING BY REASON OF RELIANCE ON THIS REPORT OR OTHERWISE. IN PROVIDING THIS REPORT, THE COMPANY IS NOT ACTING AS AN ABTRACTOR OF TITLE. IF IT IS DESIRED THAT LIABILITY BE ASSUMED BY THE COMPANY, YOU MAY REQUEST AND PURCHASE A POLICY OF TITLE INSURANCE, A BINDER, OR A COMMITMENT TO ISSUE A POLICY OF TITLE INSURANCE. NO ASSURANCE IS GIVEN AS TO THE INSURABILITY OF THE TITLE. CUSTOMER RECOGNIZES THAT THE FEE CHARGED IS NOMINAL IN RELATION TO THE POTENTIAL LIABILITY WHICH COULD ARISE FROM SUCH ERRORS, OMISSIONS OR NEGLIGENCE. THEREFORE, CUSTOMER UNDERSTANDS THAT THE COMPANY IS NOT WILLING TO PROCEED IN THE PREPARATION AND ISSUANCE OF THE REQUESTED REPORT UNLESS THE COMPANY'S LIABILITY IS STRICTLY LIMITED. CUSTOMER AGREES, AS PART OF THE CONSIDERATION FOR THE ISSUANCE OF THE REPORT, THAT THE TOTAL AGGREGATE LIABILITY OF THE COMPANY AND ITS AGENTS, SUBSIDIARIES, AFFILIATES, EMPLOYEES AND SUBCONTRACTORS SHALL NOT IN ANY EVENT EXCEED THE COMPANY'S TOTAL FEE FOR THE REPORT. IN NO EVENT WILL THE COMPANY, ITS SUBSIDIARIES, AFFILIATES, EMPLOYEES, SUBCONTRACTORS OR AGENTS BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, DIRECT, INDIRECT, PUNITIVE, EXEMPLARY OR SPECIAL DAMAGES REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, NEGLIGENCE OF THE COMPANY, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE, OR OTHERWISE.

This property profile is being provided as a general service to the community at large without the condition of the referral of title insurance business.

 **Property Overview** **, WINCHESTER, CA 92596**

Owner and Geographic Information



Primary Owner:	EMPIRE COMMUNITIES	Secondary Owner:	
Mail Address:	PO BOX 295 , TEMECULA, CA 92593-0295		
Site Address:	, WINCHESTER, CA 92596		
APN:	462-185-006	Lot Number:	1,2,3 Page / Grid:
Housing Tract Number:			
Legal Description:	Lot Code: 1,2,3 Block: 43 Legal Brief Description: LOT:1,2,3 BLK:43 1.09 ACRES M/L IN LOTS 1, 2, 3 & 4 BLK 43 MB 002/011 TOWN OF WINCHESTER FOR TOTAL DESCRIPTION SEE ASSESSORS MAPS		

Property Details



Bedrooms:	0	Year Built:		Square Feet:	
Bathrooms:	0	Garage:		Lot Size:	1.09 AC
Total Rooms:		Fireplace:		Number of Units:	0
Zoning:	RR	Pool:		Use Code:	Vacant Land (General)

Sale Information



Transfer Date:	08/01/2013	Seller:	PACIFIC WESTERN BANK,
Transfer Value:	\$120,000.00	Document#:	2013-0374331
Cost/Sq Feet:			

Assessment and Taxes



Assessed Value:	\$35,864.00	Percent Improvement:	0.00%	Homeowner Exemption:	
Land Value:	\$35,864.00	Tax Amount:	\$425.68	Tax Rate Area:	71-045
Improvement Value:	\$0.00	Tax Status:	Current	Tax Account ID:	462185006
Market Improvement Value:		Market Land Value:		Tax Year:	2020
Market Value:					



Property History , WINCHESTER, CA 92596

Prior Transfer - 08/01/2013

Recording Date:	08/01/2013	Document#:	2013-0374331
Price:	\$120,000.00 Multiple Parcels Involved in this transaction	Document Type:	Grant Deed
First TD:		Type of Sale:	Full Amount on Deed
Lender Name:		Buyer Vesting:	
Buyer Name:	EMPIRE COMMUNITIES LLC		
Seller Name:	PACIFIC WESTERN BANK		
Legal Description:	Lot Number: 1-6 Map Ref: MB2 PG11 City / Muni / Twp: WINCHESTER		

Prior Transfer - 10/14/2008

Recording Date:	10/14/2008	Document#:	2008-0552229
Price:	\$964,000.00 Multiple Parcels Involved in this transaction	Document Type:	Trustee's Deed (Certificate of Title)
First TD:		Type of Sale:	Full Amount on Deed
Lender Name:		Buyer Vesting:	
Buyer Name:	PACIFIC WESTERN BANK		
Seller Name:	WINCHESTER COLONY LLC		
Legal Description:	Lot Number: 1-6 Block: 43 Subdivision: WINCHESTER TOWNSITE Map Ref: MB2 PG11		

Foreclosure Record - 09/17/2008

Recording Date:	09/17/2008	Document#:	2008-0508591
Document Type:	Notice of Sale	Borrowers Name:	
Lender Type:			
Vesting:			
Legal Description:			

Foreclosure Record - 06/11/2008

Recording Date:	06/11/2008	Document#:	2008-0317025
Document Type:	Notice of Default	Borrowers Name:	
Lender Type:			

Vesting:

Legal Description:

Lot Number: 1-3&6-12
Block: 38
Subdivision: THE TOWN OF WINCHESTER

Mortgage Record - 03/20/2007

Recording Date:

03/20/2007

Document#:

2007-0187958

Loan Amount:

\$1,020,500.00

Loan Type:

Unknown Loan Type

TD Due Date:

Type of Financing:

Lender Name:

PACIFIC WESTERN NATIONAL BANK

Borrowers Name:

WINCHESTER COLONY LLC

Lender Type:

Vesting:

Legal Description:

Lot Number: 1-6
Block: 43
Subdivision: WINCHESTER TOWNSITE
Map Ref: 0
City / Muni / Twp: UNINCORPORATED


 **Property History**

, WINCHESTER, CA 92596

Prior Transfer - 03/20/2007

Recording Date:	03/20/2007	Document#:	2007-0187957
Price:	\$0.00 Multiple Parcels Involved in this transaction	Document Type:	Grant Deed
First TD:		Type of Sale:	Price as "0", "None", "No Consideration"
Lender Name:		Buyer Vesting:	
Buyer Name:	WINCHESTER COLONY LLC		
Seller Name:	NEVADA NOTE INVESTORS LLC		
Legal Description:	Lot Number: 1-6 Block: 43 Subdivision: WINCHESTER TOWNSITE Map Ref: MB2 PG11 City / Muni / Twp: UNINCORPORATED		

Prior Transfer - 10/10/2006

Recording Date:	10/10/2006	Document#:	2006-0744781
Price:	\$1,469,651.00 Multiple Parcels Involved in this transaction	Document Type:	Trustee's Deed (Certificate of Title)
First TD:		Type of Sale:	Full Amount on Deed
Lender Name:		Buyer Vesting:	
Buyer Name:	NEVADA NOTE INVESTORS LLC		
Seller Name:	WINCHESTER RANCH ASSOCIATES LLC		
Legal Description:	Lot Number: 1-12 Block: 43 Subdivision: WINCHESTER TOWNSITE Map Ref: MB2 PG11 City / Muni / Twp: UNINCORPORATED		

Assignment Record - 05/19/2006

Recording Date:	05/19/2006	Document#:	2006-0368199
Price:		Document Type:	Assignment of Mortgage
TD Due Date:		Type of Financing:	
Lender Name:		Borrowers Name:	WINCHESTER RANCH ASSOCIATES LLC
Lender Type:			
Vesting:			
Legal Description:			

Assignment Record - 05/17/2005

Recording Date:	05/17/2005	Document#:	2005-0390608
Price:		Document Type:	Assignment of Mortgage
TD Due Date:		Type of Financing:	
Lender Name:		Borrowers Name:	WINCHESTER RANCH ASSOCIATES LLC
Lender Type:			
Vesting:			
Legal Description:			

Mortgage Record - 04/21/2005

Recording Date:	04/21/2005	Document#:	
Loan Amount:	\$840,000.00	Loan Type:	
TD Due Date:		Type of Financing:	
Lender Name:		Borrowers Name:	WINCHESTER RANCH ASSOCIATES LLC
Lender Type:			
Vesting:			
Legal Description:	Lot Number: 1-12 Block: 43 Subdivision: WINCHESTER TOWNSITE Map Ref: MB2 PG11 City / Muni / Twp: UNINCORPORATED		



Property History **, WINCHESTER, CA 92596**

Mortgage Record - 04/21/2005

Recording Date:	04/21/2005	Document#:	2005-0312996
Loan Amount:	\$1,490,000.00	Loan Type:	Unknown Loan Type
TD Due Date:		Type of Financing:	
Lender Name:	WINDEMERE CAPITAL LLC	Borrowers Name:	WINCHESTER RANCH ASSOCIATES LLC
Lender Type:			
Vesting:			
Legal Description:	Lot Number: 1-12 Block: 43 Subdivision: WINCHESTER TOWNSITE Map Ref: MB2 PG11 City / Muni / Twp: UNINCORPORATED		

Prior Transfer - 04/21/2005

Recording Date:	04/21/2005	Document#:	2005-0312995
Price:	\$0.00 Multiple Parcels Involved in this transaction	Document Type:	Grant Deed
First TD:		Type of Sale:	Full Amount on Deed
First TD Doc:	2005-0312996		
Lender Name:		Buyer Vesting:	
Buyer Name:	WINCHESTER RANCH ASSOCIATES LLC		
Seller Name:	HDL MANAGEMENT LLC; HDL LLC		
Legal Description:	Lot Number: 1-12 Block: 43 Subdivision: WINCHESTER TOWNSITE Map Ref: MB2 PG11 City / Muni / Twp: UNINCORPORATED		

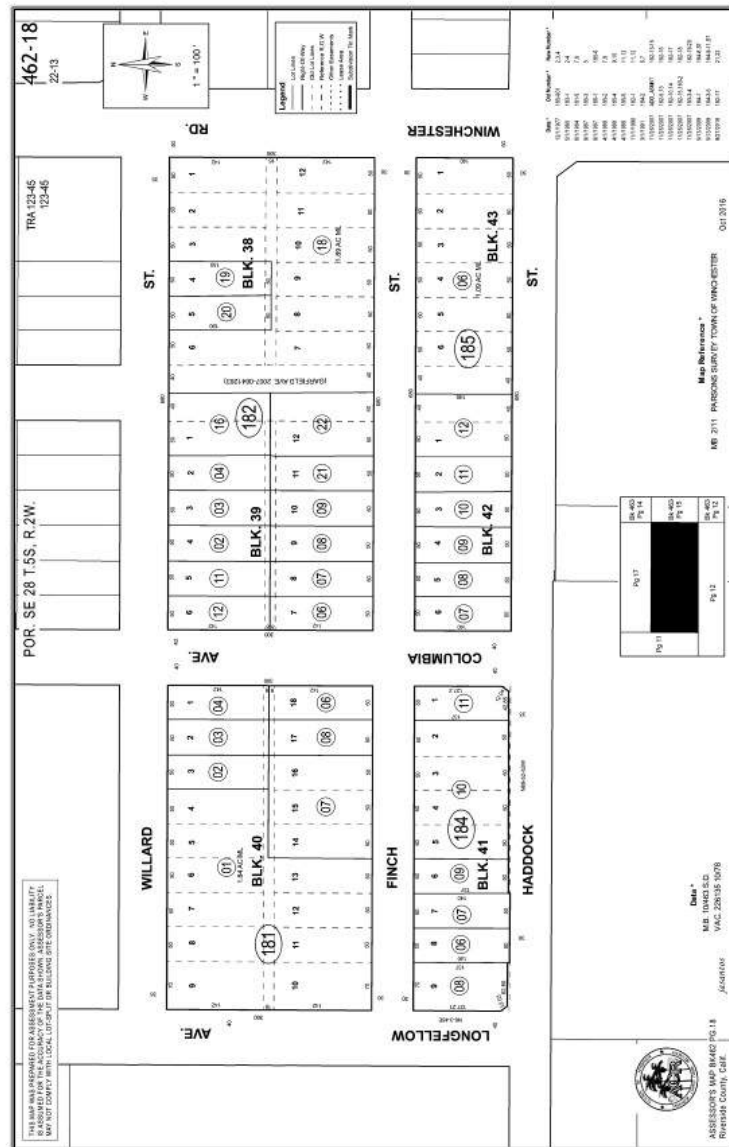
Prior Transfer - 05/28/2004

Recording Date:	05/28/2004	Document#:	2004-0406321
Price:	\$500,000.00 Multiple Parcels Involved in this transaction	Document Type:	Grant Deed
First TD:		Type of Sale:	Full-Computed from Transfer Tax
Lender Name:		Buyer Vesting:	
Buyer Name:	HDL LLC		
Seller Name:	HANDWERKER, JUDITH A; JAMES ROGER DOMENIGONI REVOCABLE TRUST		
Legal Description:	Lot Number: 1-6		

Block: 43
Subdivision: WINCHESTER TOWNSITE
Map Ref: MB2 PG11
City / Muni / Twp: UNINCORPORATED



This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.



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This property profile is being provided as a general service to the community at large without the condition of the referral of title insurance business.

APPENDIX C: REGULATORY DATABASE REPORT

APNs 462-182-018 & 462-185-006

APNs 462-182-018 & 462-185-006

WINCHESTER, CA 92596

Inquiry Number: 6410695.2s

March 18, 2021

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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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

APNS 462-182-018 & 462-185-006
WINCHESTER, CA 92596

COORDINATES

Latitude (North): 33.7042140 - 33° 42' 15.17"
Longitude (West): 117.0856850 - 117° 5' 8.46"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 492059.7
UTM Y (Meters): 3729170.5
Elevation: 1470 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5640944 WINCHESTER, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140530
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
APNS 462-182-018 & 462-185-006
WINCHESTER, CA 92596

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	STEPHEN OH DDS	33040 SIMPSON RD	RCRA NonGen / NLR	Higher	906, 0.172, NNE
2	PROPOSED MIDDLE SCHO	NORTHEAST CORNER OF	ENVIROSTOR, SCH	Lower	4186, 0.793, West

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

LUST..... Geotracker's Leaking Underground Fuel Tank Report
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

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

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

SWEEPS UST.....	SWEEPS UST Listing
HIST UST.....	Hazardous Substance Storage Container Database
CA FID UST.....	Facility Inventory Database
CERS TANKS.....	California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS.....	Environmental Liens Listing
LIENS 2.....	CERCLA Lien Information
DEED.....	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS.....	Hazardous Materials Information Reporting System
CHMIRS.....	California Hazardous Material Incident Report System
LDS.....	Land Disposal Sites Listing
MCS.....	Military Cleanup Sites Listing
SPILLS 90.....	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data

EXECUTIVE SUMMARY

CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
ECHO.....	Enforcement & Compliance History Information
UXO.....	Unexploded Ordnance Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
MINES MRDS.....	Mineral Resources Data System
HWTS.....	Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

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 10/26/2020 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>PROPOSED MIDDLE SCHO</i> Facility Id: 60000662 Status: No Further Action	<i>NORTHEAST CORNER OF</i>	<i>W 1/2 - 1 (0.793 mi.)</i>	<i>2</i>	<i>11</i>

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

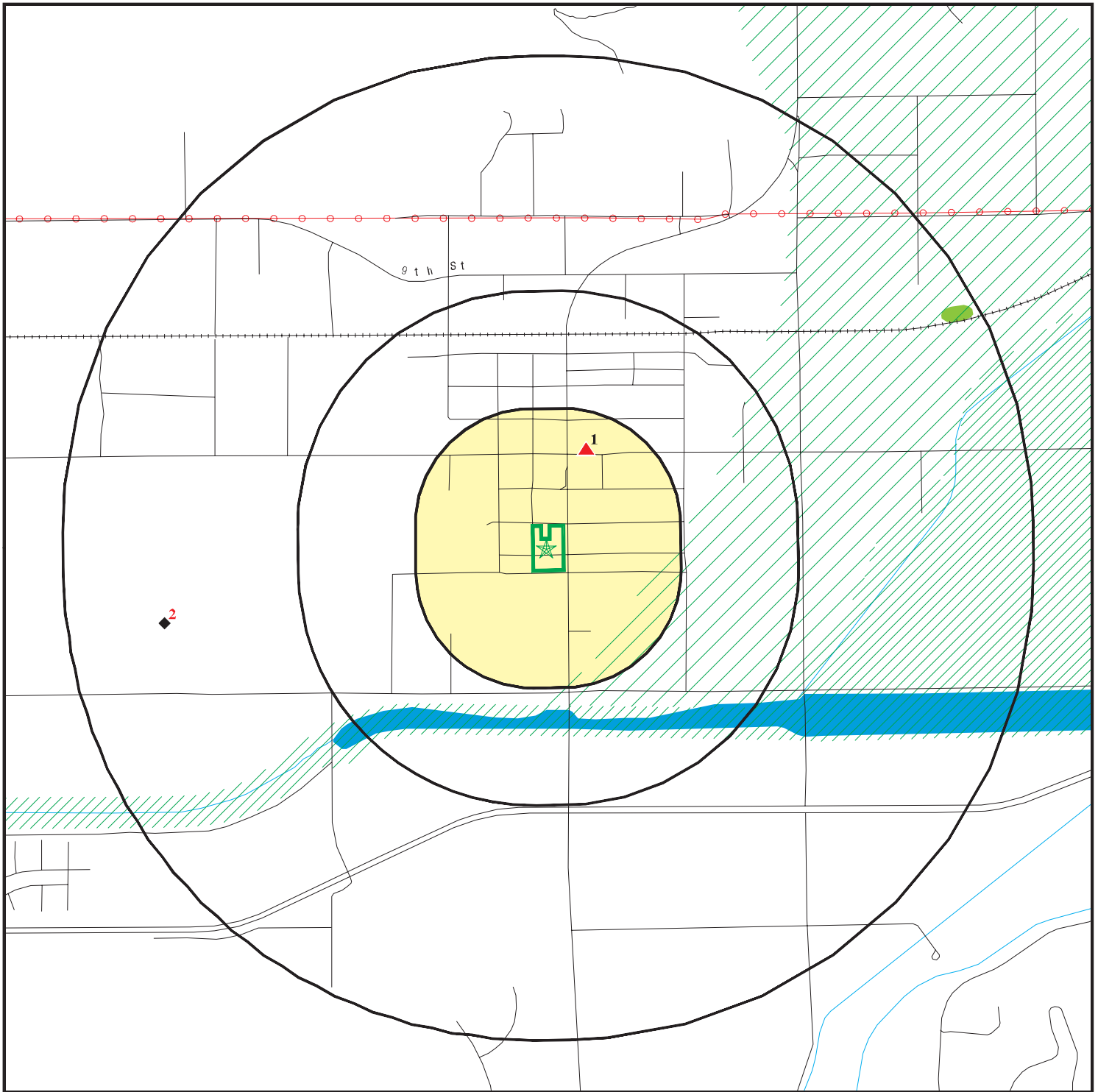
A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/14/2020 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
STEPHEN OH DDS EPA ID:: CAL000205114	33040 SIMPSON RD	NNE 1/8 - 1/4 (0.172 mi.)	1	9


EXECUTIVE SUMMARY


There were no unmapped sites in this report.

OVERVIEW MAP - 6410695.2S



 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

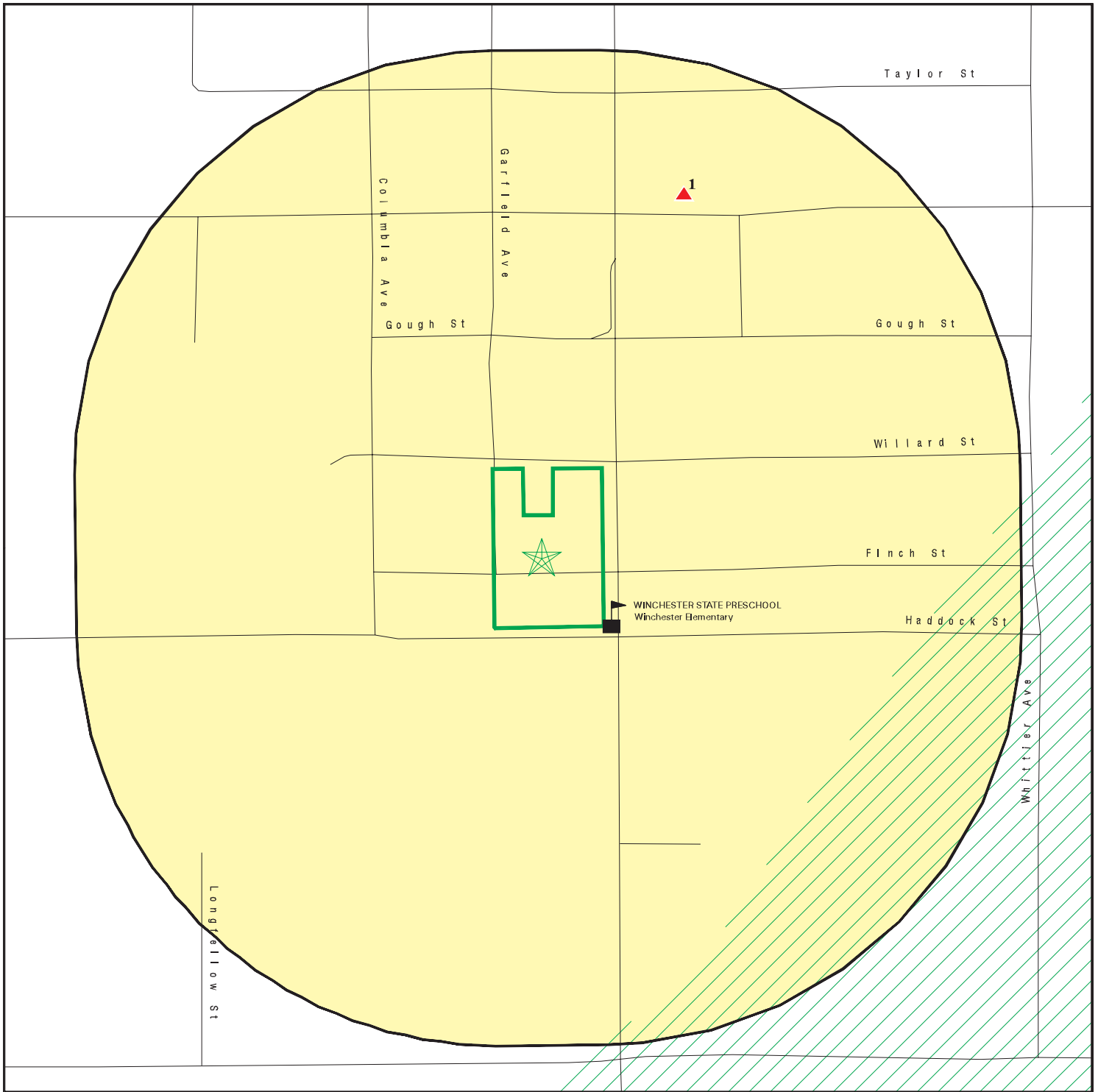









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.





SITE NAME: APNs 462-182-018 & 462-185-006
 ADDRESS: APNs 462-182-018 & 462-185-006
 WINCHESTER CA 92596
 LAT/LONG: 33.704214 / 117.085685

CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Krystal Dimmeler
 INQUIRY #: 6410695.2s
 DATE: March 18, 2021 12:33 pm

DETAIL MAP - 6410695.2S



-  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.

<p>SITE NAME: APNs 462-182-018 & 462-185-006 ADDRESS: APNs 462-182-018 & 462-185-006 WINCHESTER CA 92596 LAT/LONG: 33.704214 / 117.085685</p>	<p>CLIENT: Partner Engineering and Science, Inc. CONTACT: Krystal Dimmeler INQUIRY #: 6410695.2s DATE: March 18, 2021 12:34 pm</p>
--	---

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	0	1	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	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
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
<i>State and tribal voluntary cleanup sites</i>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
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
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
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
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
<i>Local Land Records</i>								
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	1	NR	NR	NR	1
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
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	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	0	NR	NR	0
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	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	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	1	0	1	0	2
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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>
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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
NNE
1/8-1/4
0.172 mi.
906 ft.

STEPHEN OH DDS
33040 SIMPSON RD
WINCHESTER, CA 92596

RCRA NonGen / NLR

1024798666
CAL000205114

Relative:
Higher

Actual:
1474 ft.

RCRA NonGen / NLR:		2000-09-07 00:00:00.0
Date Form Received by Agency:		
Handler Name:	STEPHEN OH DDS	
Handler Address:		33040 SIMPSON RD
Handler City,State,Zip:		WINCHESTER, CA 92596-0000
EPA ID:		CAL000205114
Contact Name:		STEPHEN OH, D.D.S
Contact Address:		33040 SIMPSON RD
Contact City,State,Zip:		WINCHESTER, CA 92596
Contact Telephone:		951-926-2489
Contact Fax:		951-926-1537
Contact Email:		STEPHEN_OH@HOTMAIL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		PO BOX 996
Mailing City,State,Zip:		WINCHESTER, CA 92596-0996
Owner Name:		STEPHEN OH
Owner Type:		Other
Operator Name:		STEPHEN OH, D.D.S
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

STEPHEN OH DDS (Continued)

1024798666

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:44:34.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	STEPHEN OH
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	33040 SIMPSON RD
Owner/Operator City,State,Zip:	WINCHESTER, CA 92596-0000
Owner/Operator Telephone:	909-926-2489
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	STEPHEN OH, D.D.S
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	33040 SIMPSON RD
Owner/Operator City,State,Zip:	WINCHESTER, CA 92596
Owner/Operator Telephone:	951-926-2489
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STEPHEN OH DDS (Continued)

1024798666

Historic Generators:

Receive Date: 2000-09-07 00:00:00.0
Handler Name: STEPHEN OH DDS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 62121
NAICS Description: OFFICES OF DENTISTS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

2
West
1/2-1
0.793 mi.
4186 ft.

PROPOSED MIDDLE SCHOOL NO. 8
NORTHEAST CORNER OF OLIVE AVENUE AND BEELER ROAD
UNINCORPORATED WINCHESTER, CA 92596

ENVIROSTOR S108649771
SCH N/A

Relative:
Lower
Actual:
1459 ft.

ENVIROSTOR:
Name: PROPOSED MIDDLE SCHOOL NO. 8
Address: NORTHEAST CORNER OF OLIVE AVENUE AND BEELER ROAD
City,State,Zip: UNINCORPORATED WINCHESTER, CA 92596
Facility ID: 60000662
Status: No Further Action
Status Date: 03/05/2008
Site Code: 404752
Site Type: School Investigation
Site Type Detailed: School
Acres: 24
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Aslam Shareef
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 67
Senate: 28
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.70196
Longitude: -117.0998

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PROPOSED MIDDLE SCHOOL NO. 8 (Continued)

S108649771

APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ORCHARD
Potential COC: Arsenic Chlordane DDD DDE DDT Lead
Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO 30013-NO
Potential Description: SOIL
Alias Name: 404752
Alias Type: Project Code (Site Code)
Alias Name: 60000662
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 07/06/2007
Comments: Signed agreement sent (FedEx) to District

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 03/06/2008
Comments: Cost Recovery Closeout Memo.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 09/14/2007
Comments: TM approval letter sent to the district

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/05/2008
Comments: Approval of Final PEA Report letter

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 02/22/2008
Comments: School District notified DTSC that the comment period ended on February 22, 2008

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: PROPOSED MIDDLE SCHOOL NO. 8
Address: NORTHEAST CORNER OF OLIVE AVENUE AND BEELER ROAD
City,State,Zip: UNINCORPORATED WINCHESTER, CA 92596

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PROPOSED MIDDLE SCHOOL NO. 8 (Continued)

S108649771

Facility ID: 60000662
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 24
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Aslam Shareef
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404752
Assembly: 67
Senate: 28
Special Program Status: Not reported
Status: No Further Action
Status Date: 03/05/2008
Restricted Use: NO
Funding: School District
Latitude: 33.70196
Longitude: -117.0998
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ORCHARD
Potential COC: Arsenic, Chlordane, DDD, DDE, DDT, Lead
Confirmed COC: 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30013-NO
Potential Description: SOIL
Alias Name: 404752
Alias Type: Project Code (Site Code)
Alias Name: 60000662
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 07/06/2007
Comments: Signed agreement sent (FedEx) to District

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 03/06/2008
Comments: Cost Recovery Closeout Memo.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 09/14/2007
Comments: TM approval letter sent to the district

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/05/2008
Comments: Approval of Final PEA Report letter

Completed Area Name: PROJECT WIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PROPOSED MIDDLE SCHOOL NO. 8 (Continued)

S108649771

Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 02/22/2008
Comments: School District notified DTSC that the comment period ended on February 22, 2008

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

Count: 0 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
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: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: N/A
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 03/04/2021
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/12/2021
	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: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: N/A
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 03/04/2021
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/12/2021
	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: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 03/04/2021
Next Scheduled EDR Contact: 04/12/2021
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: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/23/2020
Next Scheduled EDR Contact: 04/12/2021
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: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/04/2021
Next Scheduled EDR Contact: 04/26/2021
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: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: 800-424-9346
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/04/2021
Number of Days to Update: 35	Next Scheduled EDR Contact: 04/26/2021
	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: 12/14/2020	Source: EPA
Date Data Arrived at EDR: 12/17/2020	Telephone: 800-424-9346
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	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: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	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: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	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: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	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: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	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: 11/11/2020	Source: Department of the Navy
Date Data Arrived at EDR: 11/17/2020	Telephone: 843-820-7326
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 02/08/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/24/2021
	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: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 02/23/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 06/06/2021
	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: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 02/23/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 06/06/2021
	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: 12/14/2020

Date Data Arrived at EDR: 12/15/2020

Date Made Active in Reports: 12/22/2020

Number of Days to Update: 7

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 12/15/2020

Next Scheduled EDR Contact: 04/05/2021

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: 10/26/2020

Date Data Arrived at EDR: 10/26/2020

Date Made Active in Reports: 01/13/2021

Number of Days to Update: 79

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/26/2021

Next Scheduled EDR Contact: 05/10/2021

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: 10/26/2020

Date Data Arrived at EDR: 10/26/2020

Date Made Active in Reports: 01/13/2021

Number of Days to Update: 79

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/26/2021

Next Scheduled EDR Contact: 05/10/2021

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: 11/09/2020

Date Data Arrived at EDR: 11/10/2020

Date Made Active in Reports: 01/14/2021

Number of Days to Update: 65

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 02/09/2021

Next Scheduled EDR Contact: 05/24/2021

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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: 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: 12/04/2020
Date Data Arrived at EDR: 12/04/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

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, Calaveras, 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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	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	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	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	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	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	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

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: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	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: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/16/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/03/2021
	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: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020	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: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 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: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	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: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	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	Source: EPA, Region 5
Date Data Arrived at EDR: 12/16/2020	Telephone: 312-886-7439
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	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: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 07/21/2020
Date Data Arrived at EDR: 09/03/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 83

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/04/2020
Date Data Arrived at EDR: 12/04/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/04/2020	Source: SWRCB
Date Data Arrived at EDR: 12/04/2020	Telephone: 916-341-5851
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 12/02/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/08/2020	Telephone: 916-327-7844
Date Made Active in Reports: 02/23/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 06/21/2021
	Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 03/12/2021
Number of Days to Update: 69	Next Scheduled EDR Contact: 06/28/2021
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 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: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	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: 12/15/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	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).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	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: 12/16/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/03/2021
	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: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	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	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-7591
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	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	Source: EPA Region 5
Date Data Arrived at EDR: 12/16/2020	Telephone: 312-886-6136
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	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	Source: EPA Region 8
Date Data Arrived at EDR: 12/16/2020	Telephone: 303-312-6137
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 12/16/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/26/2020
Date Data Arrived at EDR: 10/26/2020
Date Made Active in Reports: 01/13/2021
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/26/2021
Next Scheduled EDR Contact: 05/10/2021
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: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Varies

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: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/17/2020
Next Scheduled EDR Contact: 04/05/2021
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: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/16/2021
Next Scheduled EDR Contact: 06/28/2021
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: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/08/2020
Date Made Active in Reports: 02/22/2021
Number of Days to Update: 76

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: 02/08/2021
Next Scheduled EDR Contact: 05/24/2021
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: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
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: 01/29/2021
Next Scheduled EDR Contact: 05/10/2021
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: 12/07/2020	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 12/09/2020	Telephone: 202-307-1000
Date Made Active in Reports: 03/02/2021	Last EDR Contact: 02/22/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 06/06/2021
	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: 10/26/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/26/2020	Telephone: 916-323-3400
Date Made Active in Reports: 01/13/2021	Last EDR Contact: 01/26/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/10/2021
	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: 06/30/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/28/2020	Telephone: 916-255-6504
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 01/19/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 04/19/2021
	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: 10/19/2020
Date Data Arrived at EDR: 10/19/2020
Date Made Active in Reports: 01/07/2021
Number of Days to Update: 80

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/20/2021
Next Scheduled EDR Contact: 05/03/2021
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: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
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: 12/07/2020
Date Data Arrived at EDR: 12/08/2020
Date Made Active in Reports: 02/22/2021
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2021
Next Scheduled EDR Contact: 06/21/2021
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: 11/05/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 81

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 10/19/2020	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2020	Telephone: 916-323-2514
Date Made Active in Reports: 01/07/2021	Last EDR Contact: 01/20/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/03/2021
	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: 11/24/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/30/2020	Telephone: 916-323-3400
Date Made Active in Reports: 02/10/2021	Last EDR Contact: 02/26/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 06/14/2021
	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: 12/30/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/14/2021	Telephone: 202-564-6023
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/04/2021
Number of Days to Update: 35	Next Scheduled EDR Contact: 04/12/2021
	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: 11/30/2020	Source: DTSC and SWRCB
Date Data Arrived at EDR: 12/01/2020	Telephone: 916-323-3400
Date Made Active in Reports: 02/12/2021	Last EDR Contact: 03/03/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 06/14/2021
	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: 12/16/2020	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 12/17/2020	Telephone: 202-366-4555
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 12/17/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 04/05/2021
	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: 09/30/2020	Source: Office of Emergency Services
Date Data Arrived at EDR: 10/19/2020	Telephone: 916-845-8400
Date Made Active in Reports: 01/07/2021	Last EDR Contact: 01/20/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/03/2021
	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: 12/04/2020	Source: State Water Quality Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/17/2020
Next Scheduled EDR Contact: 04/05/2021
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: 09/29/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 69

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
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: 01/15/2021
Next Scheduled EDR Contact: 04/26/2021
Data Release Frequency: Semi-Annually

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: 01/07/2021
Next Scheduled EDR Contact: 04/19/2021
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: 02/09/2021
Next Scheduled EDR Contact: 05/24/2021
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: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 12/17/2020
Next Scheduled EDR Contact: 04/05/2021
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: 02/02/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	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: 02/05/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/17/2021
	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: 12/18/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 03/29/2021
	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: 02/02/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/31/2021
	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: 10/19/2020	Source: EPA
Date Data Arrived at EDR: 10/19/2020	Telephone: 202-564-4203
Date Made Active in Reports: 01/04/2021	Last EDR Contact: 01/21/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 05/03/2021
	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: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: 703-416-0223
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/04/2021
Number of Days to Update: 35	Next Scheduled EDR Contact: 06/14/2021
	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: 11/02/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/12/2020	Telephone: 202-564-8600
Date Made Active in Reports: 01/25/2021	Last EDR Contact: 01/19/2021
Number of Days to Update: 74	Next Scheduled EDR Contact: 05/03/2021
	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: 03/11/2021
Number of Days to Update: 50	Next Scheduled EDR Contact: 05/17/2021
	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: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 01/08/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/19/2021
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 12/30/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	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	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	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: 08/05/2020	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 08/10/2020	Telephone: 301-415-7169
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 01/19/2021
Number of Days to Update: 59	Next Scheduled EDR Contact: 05/03/2021
	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	Source: Department of Energy
Date Data Arrived at EDR: 12/01/2020	Telephone: 202-586-8719
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 03/05/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 06/14/2021
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 03/02/2021
Number of Days to Update: 251	Next Scheduled EDR Contact: 06/14/2021
	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: 02/05/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 05/17/2021
	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: 01/08/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	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: 01/27/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/10/2021
	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: 09/30/2020
Date Data Arrived at EDR: 10/08/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 88

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
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: 12/23/2020
Next Scheduled EDR Contact: 04/05/2021
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: 01/08/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 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: 02/02/2021
Next Scheduled EDR Contact: 05/17/2021
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: 02/18/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 03/04/2021
Next Scheduled EDR Contact: 04/12/2021
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: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/01/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

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: 11/03/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 63

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/24/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Semi-Annually

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: 02/26/2021
Next Scheduled EDR Contact: 06/06/2021
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: 02/26/2021
Number of Days to Update: 97	Next Scheduled EDR Contact: 06/06/2021
	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: 12/11/2020	Source: Department of Interior
Date Data Arrived at EDR: 12/11/2020	Telephone: 202-208-2609
Date Made Active in Reports: 03/02/2021	Last EDR Contact: 03/08/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 06/21/2021
	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: 11/04/2020	Source: EPA
Date Data Arrived at EDR: 12/01/2020	Telephone: (415) 947-8000
Date Made Active in Reports: 01/25/2021	Last EDR Contact: 03/03/2021
Number of Days to Update: 55	Next Scheduled EDR Contact: 06/14/2021
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/17/2020	Telephone: 202-564-0527
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 02/26/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 06/06/2021
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 10/03/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/06/2020	Telephone: 202-564-2280
Date Made Active in Reports: 01/04/2021	Last EDR Contact: 01/08/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/15/2021
Next Scheduled EDR Contact: 04/26/2021
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: 11/13/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 73

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
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: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/17/2020
Next Scheduled EDR Contact: 04/05/2021
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: 02/12/2021
Next Scheduled EDR Contact: 05/24/2021
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: 11/17/2020
Date Data Arrived at EDR: 11/18/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 78

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
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: 11/23/2020
Date Data Arrived at EDR: 11/25/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
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: 11/23/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
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: 12/18/2020
Next Scheduled EDR Contact: 03/29/2021
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: 10/16/2020
Date Data Arrived at EDR: 10/19/2020
Date Made Active in Reports: 01/07/2021
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/20/2021
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/13/2020
Date Data Arrived at EDR: 10/14/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/22/2021
Next Scheduled EDR Contact: 05/03/2021
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: 11/12/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 01/29/2021
Number of Days to Update: 77

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/08/2021
Next Scheduled EDR Contact: 05/24/2021
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: 01/05/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/13/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 02/01/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
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 [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/13/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 02/01/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
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: 10/05/2020
Date Data Arrived at EDR: 10/06/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/05/2021
Next Scheduled EDR Contact: 04/19/2021
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: 12/07/2020
Date Data Arrived at EDR: 12/08/2020
Date Made Active in Reports: 02/22/2021
Number of Days to Update: 76

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: 10/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/09/2020
Date Data Arrived at EDR: 11/10/2020
Date Made Active in Reports: 01/27/2021
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/09/2021
Next Scheduled EDR Contact: 05/24/2021
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: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/08/2020
Date Made Active in Reports: 02/22/2021
Number of Days to Update: 76

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 12/10/2020
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
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: 02/01/2021
Date Data Arrived at EDR: 02/19/2021
Date Made Active in Reports: 02/22/2021
Number of Days to Update: 3

Source: Department of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 12/04/2020
Date Data Arrived at EDR: 12/04/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 76

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: 01/08/2021
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/19/2021
	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: 02/16/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 05/31/2021
	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: 12/15/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 12/07/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/08/2020	Telephone: 916-341-5810
Date Made Active in Reports: 02/22/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 11/30/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/01/2020	Telephone: 866-794-4977
Date Made Active in Reports: 02/12/2021	Last EDR Contact: 03/03/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 06/14/2021
	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: 10/19/2020	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2020	Telephone: 916-323-2514
Date Made Active in Reports: 01/07/2021	Last EDR Contact: 01/20/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 01/04/2021
Number of Days to Update: 55	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Semi-Annually

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: 10/13/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/14/2020	Telephone: 916-324-2444
Date Made Active in Reports: 11/03/2020	Last EDR Contact: 01/19/2021
Number of Days to Update: 20	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014	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: 01/04/2021
Number of Days to Update: 120	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Semi-Annually

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: 12/30/2020
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/19/2021
	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: 02/26/2021
Number of Days to Update: 3	Next Scheduled EDR Contact: 09/10/2018
	Data Release Frequency: Varies

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: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 10/06/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 78

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 10/19/2020
Date Data Arrived at EDR: 10/22/2020
Date Made Active in Reports: 01/12/2021
Number of Days to Update: 82

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 12/30/2020
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/24/2020
Number of Days to Update: 8

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 04/05/2021
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: 02/26/2021
Next Scheduled EDR Contact: 05/17/2021
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: 10/19/2020
Date Data Arrived at EDR: 10/22/2020
Date Made Active in Reports: 01/13/2021
Number of Days to Update: 83

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
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: 10/22/2020
Date Data Arrived at EDR: 11/03/2020
Date Made Active in Reports: 01/20/2021
Number of Days to Update: 78

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/08/2021
Next Scheduled EDR Contact: 05/10/2021
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: 10/02/2020
Date Data Arrived at EDR: 10/06/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 77

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/15/2021
Next Scheduled EDR Contact: 04/12/2021
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: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List

CUPA facility list.

Date of Government Version: 11/18/2020
Date Data Arrived at EDR: 11/19/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 77

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List

Cupa facility list.

Date of Government Version: 10/14/2020
Date Data Arrived at EDR: 10/15/2020
Date Made Active in Reports: 01/05/2021
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
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: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
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: 10/29/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 02/10/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 03/11/2021
Number of Days to Update: 27

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/11/2021
Next Scheduled EDR Contact: 04/26/2021
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: 03/12/2021
Next Scheduled EDR Contact: 05/03/2021
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: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/19/2020
Date Data Arrived at EDR: 10/20/2020
Date Made Active in Reports: 01/12/2021
Number of Days to Update: 84

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 10/09/2020
Date Made Active in Reports: 12/29/2020
Number of Days to Update: 81

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/12/2021
Next Scheduled EDR Contact: 04/26/2021
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: 12/31/2019
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/11/2021
Next Scheduled EDR Contact: 04/26/2021
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: 12/18/2020
Next Scheduled EDR Contact: 04/05/2021
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: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 01/15/2021
Number of Days to Update: 42	Next Scheduled EDR Contact: 04/26/2021
	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: 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: 12/18/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/05/2021
	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: 12/18/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/05/2021
	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: 07/20/2020	Source: Community Health Services
Date Data Arrived at EDR: 10/09/2020	Telephone: 323-890-7806
Date Made Active in Reports: 12/29/2020	Last EDR Contact: 01/12/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 04/26/2021
	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: 10/07/2020
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/25/2021
	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: 01/19/2021
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/03/2021
	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: 09/11/2020	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/07/2020	Telephone: 310-618-2973
Date Made Active in Reports: 12/23/2020	Last EDR Contact: 01/19/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 05/03/2021
	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	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 02/16/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 05/31/2021
	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	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 12/21/2020
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/21/2020	Source: Department of Public Health
Date Data Arrived at EDR: 12/21/2020	Telephone: 707-463-4466
Date Made Active in Reports: 03/10/2021	Last EDR Contact: 02/22/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 06/06/2021
	Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/04/2021	Source: Merced County Environmental Health
Date Data Arrived at EDR: 02/09/2021	Telephone: 209-381-1094
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 01/29/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 05/31/2021
	Data Release Frequency: Varies

MONO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 11/16/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 16

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 12/21/2020
Next Scheduled EDR Contact: 04/12/2021
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: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
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: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 10/26/2020
Date Data Arrived at EDR: 10/28/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 79

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
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: 09/01/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/01/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 81

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/05/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 09/01/2020
Date Data Arrived at EDR: 11/03/2020
Date Made Active in Reports: 01/21/2021
Number of Days to Update: 79

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/02/2021
Next Scheduled EDR Contact: 05/17/2021
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: 11/24/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 3

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
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: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
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: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
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: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
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: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/30/2020
Next Scheduled EDR Contact: 04/12/2021
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: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/30/2020
Next Scheduled EDR Contact: 04/12/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 77

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 11/16/2020
Date Data Arrived at EDR: 11/18/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 78

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/16/2021
Number of Days to Update: 77

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 03/15/2021
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: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
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: 02/01/2021
Next Scheduled EDR Contact: 05/03/2021
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: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 11/05/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/27/2021
Number of Days to Update: 82

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 11/05/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 81

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 02/01/2021
Number of Days to Update: 80

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
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: 03/12/2021
Next Scheduled EDR Contact: 06/21/2021
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: 03/08/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Semi-Annually

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: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 11/20/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/05/2021
Number of Days to Update: 74

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
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: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
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: 02/26/2021
Next Scheduled EDR Contact: 05/16/2021
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: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
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: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
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: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 12/03/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 7

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 04/05/2021
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: 09/18/2020
Date Data Arrived at EDR: 09/22/2020
Date Made Active in Reports: 12/14/2020
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 10/06/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 77

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/11/2021
Next Scheduled EDR Contact: 04/26/2021
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: 11/23/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 08/11/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 10/14/2020
Date Data Arrived at EDR: 10/15/2020
Date Made Active in Reports: 01/05/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List

Cupa program facilities

Date of Government Version: 10/30/2020
Date Data Arrived at EDR: 11/03/2020
Date Made Active in Reports: 01/20/2021
Number of Days to Update: 78

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
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: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
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: 09/28/2020	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 10/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 01/12/2021	Last EDR Contact: 01/19/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/02/2021
	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: 12/21/2020
Number of Days to Update: 49	Next Scheduled EDR Contact: 04/12/2021
	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: 02/08/2021
Number of Days to Update: 37	Next Scheduled EDR Contact: 05/24/2021
	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: 09/28/2020	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 10/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 01/12/2021	Last EDR Contact: 01/20/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/03/2021
	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: 12/01/2020	Source: Environmental Health Division
Date Data Arrived at EDR: 12/08/2020	Telephone: 805-654-2813
Date Made Active in Reports: 02/22/2021	Last EDR Contact: 03/09/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/21/2021
	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: 12/21/2020	Source: Yolo County Department of Health
Date Data Arrived at EDR: 12/23/2020	Telephone: 530-666-8646
Date Made Active in Reports: 01/04/2021	Last EDR Contact: 12/20/2020
Number of Days to Update: 12	Next Scheduled EDR Contact: 04/11/2021
	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: 01/26/2021
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 02/03/2021
Number of Days to Update: 6

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 02/23/2021
Next Scheduled EDR Contact: 05/10/2021
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: 08/10/2020
Date Data Arrived at EDR: 10/20/2020
Date Made Active in Reports: 11/02/2020
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/12/2021
Next Scheduled EDR Contact: 05/24/2021
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: 01/08/2021
Next Scheduled EDR Contact: 04/19/2021
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: 01/29/2021
Next Scheduled EDR Contact: 05/10/2021
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: 01/11/2021
Next Scheduled EDR Contact: 04/26/2021
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: 02/09/2021
Next Scheduled EDR Contact: 05/31/2021
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: 03/08/2021
Next Scheduled EDR Contact: 06/21/2021
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

APNS 462-182-018 & 462-185-006
APNS 462-182-018 & 462-185-006
WINCHESTER, CA 92596

TARGET PROPERTY COORDINATES

Latitude (North): 33.704214 - 33° 42' 15.17"
Longitude (West): 117.085685 - 117° 5' 8.47"
Universal Tranverse Mercator: Zone 11
UTM X (Meters): 492059.7
UTM Y (Meters): 3729170.5
Elevation: 1470 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5640944 WINCHESTER, 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).

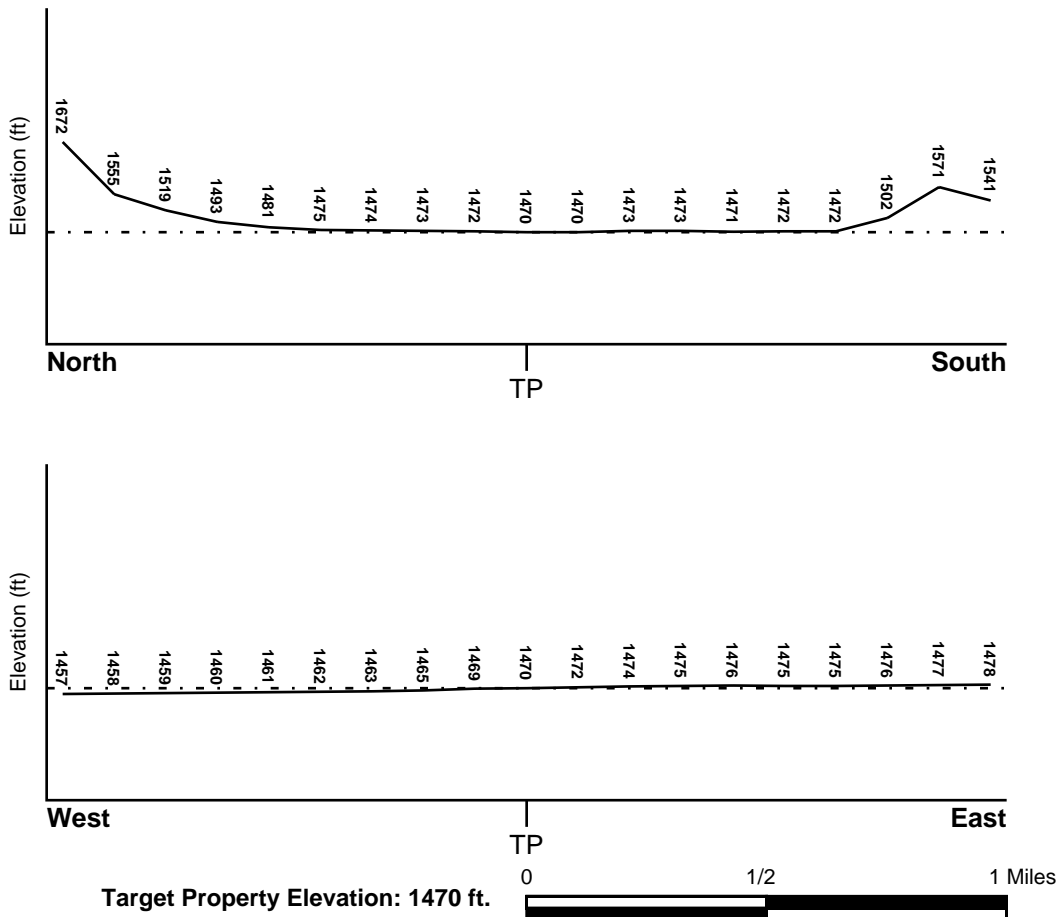
TOPOGRAPHIC INFORMATION

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 West

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>
06065C2080G	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
Not Reported	

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

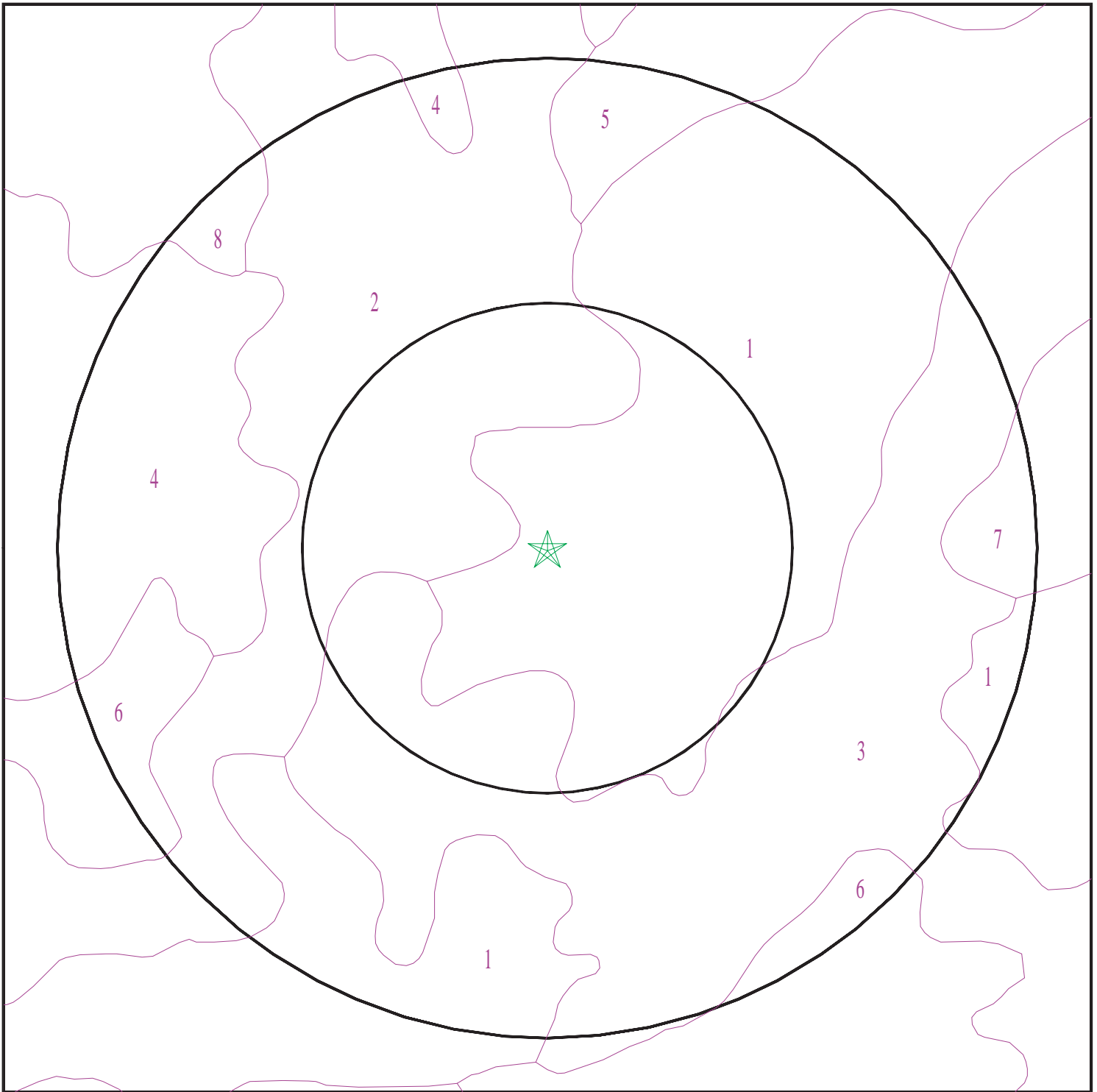
Era: Mesozoic
System: Lower Jurassic and Upper Triassic
Series: Lower Mesozoic
Code: IMze (*decoded above as Era, System & Series*)

GEOLOGIC AGE IDENTIFICATION

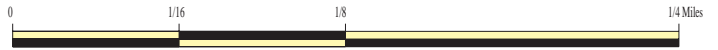
Category: Eugeosynclinal Deposits

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 - 6410695.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: APNs 462-182-018 & 462-185-006
ADDRESS: APNs 462-182-018 & 462-185-006
WINCHESTER CA 92596
LAT/LONG: 33.704214 / 117.085685

CLIENT: Partner Engineering and Science, Inc.
CONTACT: Krystal Dimmeler
INQUIRY #: 6410695.2s
DATE: March 18, 2021 12:35 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: EXETER

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

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	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	16 inches	37 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	37 inches	50 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
4	50 inches	59 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: DOMINO

Soil Surface Texture: fine sandy loam

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

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 9 Min: 7.9
2	14 inches	27 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 9 Min: 7.9
3	27 inches	35 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 9 Min: 7.9
4	35 inches	62 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 9 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 3

Soil Component Name: HANFORD

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: 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	7 inches	coarse sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6
2	7 inches	40 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6
3	40 inches	59 inches	stratified loamy sand to coarse sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6

Soil Map ID: 4

Soil Component Name: DOMINO

Soil Surface Texture: silt 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: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially 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	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 9 Min: 7.9
2	14 inches	27 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 9 Min: 7.9
3	27 inches	35 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 9 Min: 7.9
4	35 inches	62 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 9 Min: 7.9

Soil Map ID: 5

Soil Component Name: GREENFIELD

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	25 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
2	25 inches	42 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
3	42 inches	59 inches	loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
4	59 inches	72 inches	stratified loamy sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6

Soil Map ID: 6

Soil Component Name: EXETER

Soil Surface Texture: sandy loam

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

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: 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	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	16 inches	37 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
3	37 inches	50 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
4	50 inches	59 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

Soil Map ID: 7

Soil Component Name: EXETER

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

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	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	16 inches	37 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	37 inches	50 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
4	50 inches	59 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 8

Soil Component Name: MADERA

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially 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	18 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
2	18 inches	25 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
3	25 inches	37 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
4	37 inches	61 inches	stratified coarse sandy loam to clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	USGS40000137056	1/8 - 1/4 Mile ESE
4	USGS40000136965	1/4 - 1/2 Mile SE
B7	USGS40000136926	1/2 - 1 Mile SW
D15	USGS40000136917	1/2 - 1 Mile WSW
E19	USGS40000137132	1/2 - 1 Mile WNW
E20	USGS40000137131	1/2 - 1 Mile WNW
E21	USGS40000137130	1/2 - 1 Mile WNW
F22	USGS40000137207	1/2 - 1 Mile NW
G23	USGS40000137249	1/2 - 1 Mile NW

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

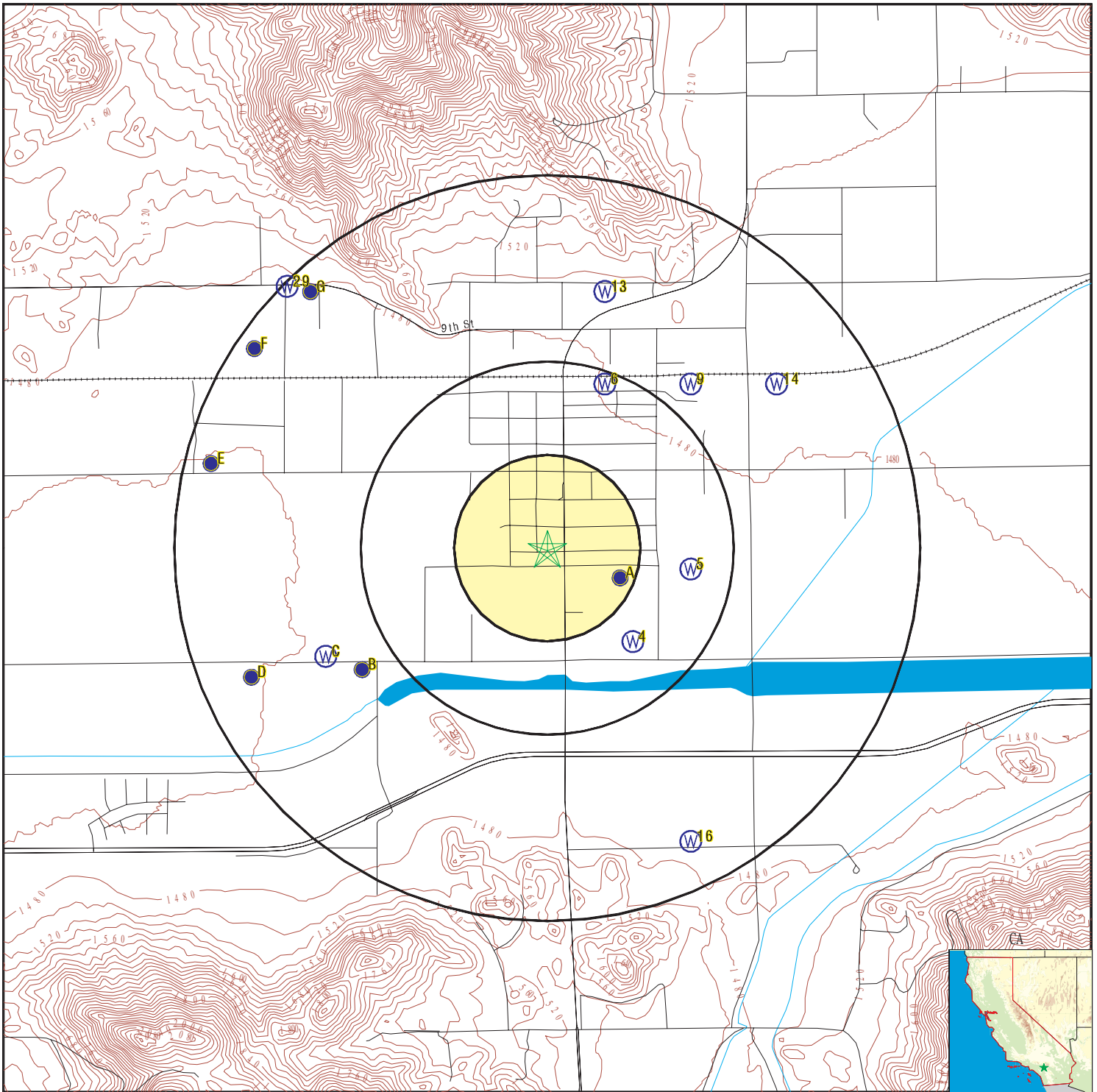
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	CADWR8000005012	1/8 - 1/4 Mile ESE
A3	CAUSGSN00002563	1/8 - 1/4 Mile ESE
5	CADWR0000033727	1/4 - 1/2 Mile East
6	CADWR0000011939	1/4 - 1/2 Mile NNE
B8	CADWR0000033854	1/2 - 1 Mile SW
9	CADWR0000033723	1/2 - 1 Mile NE
B10	CADWR8000004964	1/2 - 1 Mile WSW
C11	CADWR0000033134	1/2 - 1 Mile WSW
C12	CADWR0000035007	1/2 - 1 Mile WSW
13	CADWR0000017600	1/2 - 1 Mile NNE
14	CADWR0000027729	1/2 - 1 Mile NE
16	CADWR0000000532	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
D17	CADWR8000004962	1/2 - 1 Mile WSW
E18	CAUSGSN00005301	1/2 - 1 Mile WNW
G24	CADWR8000005110	1/2 - 1 Mile NW
E25	CADWR8000005051	1/2 - 1 Mile WNW
E26	CADWR8000005052	1/2 - 1 Mile WNW
E27	CADWR8000005050	1/2 - 1 Mile WNW
F28	CADWR8000005092	1/2 - 1 Mile WNW
29	CAEDF0000005736	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 6410695.2s



- 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: APNs 462-182-018 & 462-185-006
 ADDRESS: APNs 462-182-018 & 462-185-006
 WINCHESTER CA 92596
 LAT/LONG: 33.704214 / 117.085685

CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Krystal Dimmeler
 INQUIRY #: 6410695.2s
 DATE: March 18, 2021 12:35 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A1
ESE
1/8 - 1/4 Mile
Higher

CA WELLS CADWR8000005012

State Well #:	05S02W27N001S	Station ID:	6285
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

A2
ESE
1/8 - 1/4 Mile
Higher

FED USGS USGS40000137056

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W27N001S	Type:	Well
Description:	ORIGINAL DEPTH 105 FT SOUNDED	57.8	5-13-93
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:	19870508	Well Depth:	57.8
Well Depth Units:	ft	Well Hole Depth:	105
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	1994-06-16
Feet below surface:	8.59	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1993-12-30	Feet below surface:	11.27
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1993-05-12	Feet below surface:	9.27
Feet to sea level:	Not Reported	Note:	Not Reported

A3
ESE
1/8 - 1/4 Mile
Higher

CA WELLS CAUSGSN00002563

Well ID:	USGS-33421117045201	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-33421117045201	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-33421117045201&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

4
SE
1/4 - 1/2 Mile
Higher

FED USGS USGS40000136965

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W27N002S	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:	19840405	Well Depth:	560
Well Depth Units:	ft	Well Hole Depth:	560
Well Hole Depth Units:	ft		

5
East
1/4 - 1/2 Mile
Higher

CA WELLS CADWR0000033727

Well ID:	05S02W27P001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W27P001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W27P001S&store_num=		
GeoTracker Data:	Not Reported		

6
NNE
1/4 - 1/2 Mile
Higher

CA WELLS CADWR0000011939

Well ID:	05S02W27E002S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W27E002S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W27E002S&store_num=		
GeoTracker Data:	Not Reported		

B7
SW
1/2 - 1 Mile
Lower

FED USGS USGS40000136926

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W33C001S	Type:	Well
Description:	ORIG DEPTH 415 FT SOUNDED 70.2 FT MAY 16 1995		
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

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Construction Date:	19500923	Well Depth:	70.2
Well Depth Units:	ft	Well Hole Depth:	438
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:	7	Level reading date:	1995-09-13
Feet below surface:	10.45	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1995-05-16	Feet below surface:	8.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-11-17	Feet below surface:	11.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-06-16	Feet below surface:	10.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-02-10	Feet below surface:	9.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-05-13	Feet below surface:	8.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-12-30	Feet below surface:	16.44
Feet to sea level:	Not Reported	Note:	Not Reported

**B8
SW
1/2 - 1 Mile
Lower**

CA WELLS CADWR0000033854

Well ID:	05S02W33C001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W33C001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W33C001S&store_num=		
GeoTracker Data:	Not Reported		

**9
NE
1/2 - 1 Mile
Higher**

CA WELLS CADWR0000033723

Well ID:	05S02W27F001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W27F001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W27F001S&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B10
WSW
1/2 - 1 Mile
Lower

CA WELLS CADWR8000004964

State Well #:	05S02W33C001S	Station ID:	28635
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

C11
WSW
1/2 - 1 Mile
Lower

CA WELLS CADWR0000033134

Well ID:	05S02W33C003S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W33C003S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W33C003S&store_num=		
GeoTracker Data:	Not Reported		

C12
WSW
1/2 - 1 Mile
Lower

CA WELLS CADWR0000035007

Well ID:	05S02W33C002S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W33C002S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W33C002S&store_num=		
GeoTracker Data:	Not Reported		

13
NNE
1/2 - 1 Mile
Higher

CA WELLS CADWR0000017600

Well ID:	05S02W27D001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W27D001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W27D001S&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

14
NE
1/2 - 1 Mile
Higher

CA WELLS CADWR0000027729

Well ID:	05S02W27G001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W27G001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W27G001S&store_num=		
GeoTracker Data:	Not Reported		

D15
WSW
1/2 - 1 Mile
Lower

FED USGS USGS40000136917

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W33D001S	Type:	Well
Description:	ORIG DEPTH 270 FT SOUNDED 145 FT MAY 16 1995		
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:	194611	Well Depth:	145
Well Depth Units:	ft	Well Hole Depth:	270
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	7	Level reading date:	1995-09-13
Feet below surface:	8.44	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1995-05-16	Feet below surface:	6.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-11-17	Feet below surface:	10.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-06-16	Feet below surface:	9.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-02-10	Feet below surface:	8.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-12-30	Feet below surface:	15.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-05-13	Feet below surface:	7.32
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

16
SSE
1/2 - 1 Mile
Higher

CA WELLS CADWR0000000532

Well ID:	05S02W34L001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S02W34L001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S02W34L001S&store_num=		
GeoTracker Data:	Not Reported		

D17
WSW
1/2 - 1 Mile
Lower

CA WELLS CADWR8000004962

State Well #:	05S02W33D001S	Station ID:	6295
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

E18
WNW
1/2 - 1 Mile
Lower

CA WELLS CAUSGSN00005301

Well ID:	USGS-334227117060001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-334227117060001	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334227117060001&store_num=		
GeoTracker Data:	Not Reported		

E19
WNW
1/2 - 1 Mile
Lower

FED USGS USGS40000137132

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W28E003S	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:	19931011	Well Depth:	233.8
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels, Number of Measurements:	5	Level reading date:	1994-11-17
Feet below surface:	7.83	Feet to sea level:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Not Reported		
Level reading date:	1994-06-21	Feet below surface:	10.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-06-16	Feet below surface:	10.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-02-10	Feet below surface:	9.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-12-03	Feet below surface:	25.67
Feet to sea level:	Not Reported	Note:	Not Reported

**E20
WNW
1/2 - 1 Mile
Lower**

FED USGS USGS40000137131

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W28E002S	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:	19931011	Well Depth:	311.5
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	5	Level reading date:	1994-11-17
Feet below surface:	8.45	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1994-06-21	Feet below surface:	7.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-06-16	Feet below surface:	7.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-02-10	Feet below surface:	6.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-12-03	Feet below surface:	7.08
Feet to sea level:	Not Reported	Note:	Not Reported

**E21
WNW
1/2 - 1 Mile
Lower**

FED USGS USGS40000137130

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W28E001S	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		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19931011	Well Depth:	400.3
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	5	Level reading date:	1994-11-17
Feet below surface:	9.54	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1994-06-21	Feet below surface:	9.19
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1994-06-16	Feet below surface:	9.38
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1994-02-10	Feet below surface:	9.53
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1993-12-03	Feet below surface:	21.20
Feet to sea level:	Not Reported	Note:	Not Reported

**F22
NW
1/2 - 1 Mile
Lower**

FED USGS USGS40000137207

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W28D001S	Type:	Well
Description:	ORIG DEPTH 208 FT SOUNDED 153.9 FT MAY 16 1995		
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:	19540819	Well Depth:	153.9
Well Depth Units:	ft	Well Hole Depth:	208
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1995-05-16
Feet below surface:	10.98	Feet to sea level:	Not Reported
Note:	Not Reported		

**G23
NW
1/2 - 1 Mile
Higher**

FED USGS USGS40000137249

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S002W28C001S	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:	19830126	Well Depth:	300
Well Depth Units:	ft	Well Hole Depth:	300
Well Hole Depth Units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels, Number of Measurements:	1	Level reading date:	1995-05-22
Feet below surface:	22.68	Feet to sea level:	Not Reported
Note:	Not Reported		

**G24
NW
1/2 - 1 Mile
Higher**

CA WELLS CADWR8000005110

State Well #:	05S02W28C001S	Station ID:	28627
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

**E25
WNW
1/2 - 1 Mile
Lower**

CA WELLS CADWR8000005051

State Well #:	05S02W28E002S	Station ID:	39314
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

**E26
WNW
1/2 - 1 Mile
Lower**

CA WELLS CADWR8000005052

State Well #:	05S02W28E003S	Station ID:	6287
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

**E27
WNW
1/2 - 1 Mile
Lower**

CA WELLS CADWR8000005050

State Well #:	05S02W28E001S	Station ID:	28628
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

**F28
WNW
1/2 - 1 Mile
Lower**

CA WELLS CADWR8000005092

State Well #:	05S02W28D001S	Station ID:	6286
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	San Jacinto	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

29
NW
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000005736

Well ID: Source: GAMA PFAS Testing: Groundwater Quality Data: GeoTracker Data:	L10004864228-DG-09 EDF Not Reported https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=L10004864228&assigned_name=DG-09&store_num= https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=L10004864228&assigned_name=DG-09	Well Type: Other Name:	MONITORING DG-09
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for RIVERSIDE County: 2

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

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
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 IRRA 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

Majored in English and Psychology, Point Loma Nazarene University, Point Loma, California

Highlights

10 years in the property management and building construction field

7 years in the environmental engineering industry

Phase I Environmental Site Assessments

Environmental Desktop Reports

Construction Progress Monitoring

Experience Summary

Ms. Amezcua has seven years of experience in the environmental industry and is a project scientist at Partner Engineering and Science, Inc. She has significant experience providing due diligence assessments for a variety of property types and exceeding the needs and requirements for a diverse number of reporting standards, including ASTM standards, EPA's All Appropriate Inquiry (AAI), and customized client formats for Phase I Environmental Site Assessments, Transaction Screen Assessments, Environmental Desktop Reports, Peer Reviews and Construction Progress Monitoring.

Ms. Amezcua has served as a project manager on jobs involving large development sites, dairies, gasoline stations, two local college districts, agricultural packing houses, trucking facilities, commercial, office, industrial, towing yards and agricultural properties of various kinds cataloging the presence of hazardous materials or petroleum products and has completed hundreds of complex historical industrial/commercial assessments throughout the Central Valley of California.

Ms. Amezcua has experience gathering historical research pertaining to each site, encompassing; review of historical aerial photographs, reverse street directories, building permits, planning records, topographical maps, Sanborn fire insurance maps, department of oil and gas maps, title information, geology and hydrology, soil type, groundwater depth, regulatory research, fire departments, state environmental agencies, federal environmental agencies, interviews and document review. Ms. Amezcua has led radon testing for apartment complexes, collected lead based paint and asbestos samples and made recommendations based on the findings. Ms. Amezcua also interviews tenants, owners, state/local regulators, and reviewed provided reports, as well as, formulating and crafting effective, persuasive arguments for conclusions reached utilizing multiple historical and current resources to document findings.

Project Experience

Highway 99 South, Selma, California-Proposed Hotel Property. The subject property at the time of the assessment was observed to be a vacant graded parcel of land that was being assessed for the construction of a prospective hotel site. Review of historical aerial photographs identified a 1950s use that appeared to be a former travel trailer and camping site. Consultations with State and local regulatory agency records and interviews with persons knowledgeable of the site did not identify any known past uses of the property. Based on the inherent potential for onsite fueling due to the convenient location near to Highway 99, a Phase II recommendation was made for a geophysical survey that ultimately discovered previously unknown underground storage tanks (USTs) onsite. Analytical soil sampling and the removal of the USTs was conducted with the results returning non-detect for constituents of concern. The culmination of the two assessments conducted on the property indicated no further assessment was necessary.

P Street Property Downtown Fresno, California. A review of a regulatory agency data indicated a potential environmental concern. The subject property at the time of the assessment consisted of a vacant warehouse and a parking lot totaling 2.66 acres. Review of the City of Fresno Fire Department (CFFD) historical records identified the presence of a former 1,000-gallon fuel underground storage tank (UST) that was permitted on January 17, 1949. Subsequent documents indicate the removal and or abandonment of the UST in 1967. An inspection report dated in 1967 indicated an assessment utilizing a metal detecting instrument that did not find the former UST. No additional records pertaining to the UST were identified on file with the State or local regulatory agencies consulted during the course of the assessment. Based on the reported absence of the UST on the subject property during the metal detection investigation in 1967 and subsequent redevelopment of the subject property it was determined that the UST had most likely been removed. However, based on the absence of soil sampling and analysis during the tank removal activities or subsequent subsurface investigations of the UST, the UST was considered a recognized environmental condition. A Phase II subsurface investigation was conducted that identified three areas of subsurface anomalies that appeared to be a compilation of metallic objects rather than one singular object. Soil samples were tested by a State certified analytical laboratory that returned non-detect for constituents of concern in the former UST location that was identified in the CFFD records. The culmination of the two assessments conducted on the property indicated no further assessment was necessary.

Musco Olive Company Property. The assessment was comprised of review of several State and local regulatory agency data that indicated a number of potential environmental concerns. The subject property was observed to be occupied by Musco Olive Products Co. (Musco), as a commercial olive production facility with a 332,256 square foot building on 309 acres. Onsite operations consist of the storage, curing, brining, rinsing and canning of olives. Other subject property features include evaporation and irrigation ponds, and saline extraction forage crops. The site is regulated by the California Regional Water Quality Control Board (RWQCB), for surface impoundments which receive concentrated process water and spent lye solutions and the less concentrated process water system which is aerated and utilized to irrigate approximately 200+ acres of forage crop. Several onsite monitoring wells are monitored by the RWQCB for alkalinity, TSD, sodium, chloride, manganese and bicarbonate. A review of the RWQCB records indicated substantial compliance with the regulatory agency requirements. The site formerly operated four USTs that were reported in local regulatory agency records absent any indications of the specific use. Upon review of the records and interviews with the site contact, the USTs were identified as exclusively for the storage of vinegar and were determined as not a concern or an REC. Partner identified a California Division of Oil, Gas, and Geothermal Resources (DOGGR) Maps plugged oil well associated with the subject property abandoned October of 1993. According to the site contact, the injection well was not intended to be a gas or oil exploration well, but that the deep well was to be utilized to dispose of process water to the subsurface but that the ground was too dense to receive large amounts of water so the project was abandoned. Based on the review of the records, site observations and interviews with the site contact no recognized environmental concerns were identified and no further assessment appeared to be necessary.

Large Dairy Operation, Bakersfield, California. The subject property at the time of the assessment was utilized as a 320+ acre dairy and an agriculturally cultivated property. Consultations with State and local regulatory agency records, regulatory database review and interviews with persons knowledgeable of the site did not identify any initial concerns associated with the property. No RECs were identified at the time of the assessment, however large capacity fueling, equipment repairing and the storage of hazardous substances with staining on unpaved ground surfaces were identified onsite constituting an environmental

concern. It was determined that the farming practices appeared to be in substantial compliance with the regulatory agencies and a recommendation for secondary containment and removal of the stained soils was made. The result of the assessment of the property indicated no further assessment was necessary.

Restaurant Site/Historical Gasoline Station, Lodi California. The subject property at the time of the assessment was occupied by a fast food restaurant on a single parcel of land of 0.88 acres located to the west of State Route 99. No environmental concerns were identified during the review of State regulatory agency or the database report. However, a review of historical aerial photographs and the City of Lodi Building Department (CLBD) records identified a gasoline service station operated on the subject property from 1965 to 1986 with four 6,000-gallon gasoline underground storage tanks (USTs). No additional records related to the former gasoline service station including UST removals and/or subsurface investigations were found on file with the State or local regulatory agencies consulted during the course of this assessment. Experience with historical gasoline service stations indicates that full services which include fueling and automotive service/repair were commonly conducted with little to no regulatory oversight. These operations commonly utilize petroleum products, solvents, and other hazardous materials are commonly stored and utilized. Based on the historical presence of a gasoline service station on the subject property for at least 20 years coupled with the absence of previous subsurface investigations and UST removal documentation, the historical gasoline service station operations on the subject property was considered an REC. A Phase II ESA confirmed the removal of the former subsurface features and six soil borings returned non-detect for constituents of concern. The culmination of the two assessments conducted on the property indicated no further assessment was necessary.

Contact

samezcua@partneresi.com

Education

B.S., in Environmental Science, University of California, Los Angeles
Minor in Environmental Health Science

Registrations

AHERA Certified Asbestos Building Inspector, AIR030816612N9319
Environmental Management Certificate Program (University of California, Irvine- University Extension)

Training

Asbestos Building Inspector Initial Course

Highlights

8 years in the environmental consulting industry
8 years of experience performing due diligence assessments including Phase I site Assessments, Transaction Screen Assessments and Environmental Desktop Reports

Experience Summary

Ms. Nguyen currently holds the role of a Project Manager and her responsibilities include managing and performing Phase I Site Assessments 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. In addition, Ms. Nguyen performs limited asbestos surveys, lead-based paint surveys and radon testing as required per scope of work. Ms. Nguyen also serves as a technical reviewer on environmental due diligence assessments.

Ms. Nguyen has been responsible for the completion of Phase I Site Assessments for various properties including gas stations, dry cleaners, manufacturing sites, industrial/warehouse facilities, hotels, office buildings, retail shopping centers, machine shops, auto repair facilities, cell phone data towers and associated land, recycling facilities, and multi-use commercial/residential buildings. Ms. Nguyen has coordinated the completion of various assessments across the United States.

Project Experience

Ms. Nguyen has over eight years of experience performing due diligence assessments for a variety of property types, as detailed above. For each assessment she reviews the condition of the building structure and systems and develops a thorough report.

Phase I Environmental Site Assessment, Gasoline service stations, Nationwide. Ms. Nguyen conducted, managed, and/or reviewed Phase I Environmental Site Assessments on operating and closed gasoline service stations throughout the continental United States and Hawaii. Conducted extensive reviews of subsurface investigations to evaluate the potential for the presence of residual contamination or undiscovered contamination to remain in place.

Phase I Environmental Site Assessment, Various Apartment Complexes, Nationwide. Ms. Nguyen conducted, managed and performed quality control oversight for the completion of numerous Phase I Environmental

Christine Nguyen

Site Assessments in accordance with the Fannie Mae scope of work for various apartment complexes throughout the United States.

Phase I Environmental Site Assessment, Industrial Facilities, Various Locations Throughout Los Angeles and Orange County, California. Ms. Nguyen conducted, managed, and/or reviewed multiple Phase I ESAs for industrial sites of various sizes.

Phase I Environmental Site Assessment, Landfill, Los Angeles and Orange County, California. Ms. Nguyen conducted and reviewed several Phase I ESA for former landfill sites being redeveloped for commercial or residential use.

Phase I Environmental Site Assessment, Hotel, Beverly Hills, California. Ms. Nguyen performed a Phase I ESA for a well-known, five-star, full service hotel with onsite dry cleaning and previous onsite gas station operations.

Contact

cdnguyen@partneresi.com

Education

B.A., Environmental Health & Planning and Criminal Justice, University of California, Irvine

Registrations/Training

OSHA 40-Hour Hazwoper Health and Safety Training
EPA Accredited Asbestos Inspector
EPA Accredited Asbestos Management Planner
EPA Accredited Asbestos Abatement/Contractor Supervisor
HUD Map Underwriter Certification – 2004

Highlights

25 years of experience in national environmental due diligence consulting
Phase I Environmental Site Assessments
Phase II Subsurface Soil/Soil Gas Investigations
Property Condition Assessments
Asbestos/Lead-Based Paint Inspections

Experience Summary

Mr. Vaughn currently serves as a National Client Manager with significant environmental and due diligence engineering experience nationwide. Mr. Vaughn's experience includes two former Engineering News-Record Top 500 Design firms and a Fortune 500 firm. His responsibilities include full-phase environmental consulting, national client management, multi-scope contract negotiation/execution, portfolio project management, and technical report quality control. Mr. Vaughn's regional and national expertise compliments the wide variety of Partner projects and client types including prominent fast-food retail chains, attorneys, commercial developers, mortgage bankers, real estate brokers, individual investors, equity/institutional investment groups, and financial lending institutions, including CMBS lenders, SBA lenders, and GSA (Fannie and Freddie) lenders.

Mr. Vaughn has served as an environmental scientist, project manager, or executive senior author on over 20,000 real estate transactions. Mr. Vaughn's due diligence resume includes experience at all levels, advising lenders and real estate investors through the following product types:

- Phase I Environmental Site Assessments
- Phase II Subsurface Investigations
- Phase III Site Characterizations
- Remedial Cost Estimates
- Remediation Design and Implementation
- Environmental Transaction Screens
- Property Condition Assessments
- Probable Maximum Loss Assessments
- Property Condition Evaluations
- Asbestos Surveys
- Lead-Based Surveys

Real estate investors, redevelopment agencies, financial institutions, insurance lenders, and real estate equity funds have come to rely on his advice and judgment to help them with their real estate business decisions. Mr. Vaughn is a dedicated professional who takes pride and pleasure in meeting his client's needs and spearheading and assembling the team with the expertise to handle any issue that may come up during the transaction.

Project Experience

Multi-Site Portfolio, Nationwide. Managed performance and delivery of summary matrix and completed Phase I reports for a 300+-site portfolio of apartments for a large stakeholder group.

Multi-Site Portfolio, Nationwide. Managed a 350+-site portfolio of bank branches for one of the largest bank mergers the mid-1990s.

High Rise Office Building, San Francisco. Worked on one of the largest high rise acquisitions in San Francisco in 2015 to manage pre-acquisition due diligence for equity investor of a high rise office building in downtown San Francisco. Included a Phase I ESA, equity PCA with specialty evaluations of facade, MEP, Fire and Life Safety, Roof, and ADA.

Multi-Site Gas Station Portfolio, California. Managed performance and delivery of complete reports for a 25-site portfolio of gas stations for national lender.

Multi-Site Fast-Food Portfolio, Midwest. Managed the completion of 25 Phase I ESAs located in the Midwest in a 10-business day turnaround.

Affiliations

Environmental Banks Association
National Retail Tenants Association

Speaking

Due Diligence 101, National Retail Tenants Association, Orlando, FL.

Environmental Due Diligence: What You Don't Know Can Hurt You, National Retail Tenants Association, Reno NV.

Contact

rvaughn@partneresi.com

Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

See Appendix 3, for
infiltration tests.

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

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 **HZAYEN DESIGN GROUP, INC.**

Date **11/2/2022**

Designed by **IBRAHIM HZAYEN**

Case No

Company Project Number/Name

BMP Identification

BMP NAME / ID **DMA1**

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} = **0.68** 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)
DMA1	69656	Gravel or Class 2 Permeable Base	0.1	0.11	7694.1			
	69656				7694.1	0.68	436	436

Notes:

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 **HZAYEN DESIGN GROUP, INC.**

Date **11/2/2022**

Designed by **IBRAHIM HZAYEN**

Case No

Company Project Number/Name

BMP Identification

BMP NAME / ID **DMA 2**

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} = **0.68** 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)
DMA2	84352	Gravel or Class 2 Permeable Base	0.1	0.11	9317.4			
	84352				9317.4	0.68	528	528

Notes:

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 **HZAYEN DESIGN GROUP, INC.**

Date **11/2/2022**

Designed by **IBRAHIM HZAYEN**

Case No

Company Project Number/Name

BMP Identification

BMP NAME / ID **DMA3**

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} = **0.68** 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)
DMA3	40940	Mixed Surface Types	0.79	0.59	24060			
	40940				24060	0.68	1363.4	1363.4

Notes:

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 **HZAYEN DESIGN GROUP, INC.**

Date **11/2/2022**

Designed by **IBRAHIM HZAYEN**

Case No

Company Project Number/Name

BMP Identification

BMP NAME / ID **DMA4**

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} = **0.68** 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)
DMA4	11315	Mixed Surface Types	0.81	0.61	6915.3			
	11315				6915.3	0.68	391.9	392

Notes:

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 **HZAYEN DESIGN GROUP, INC.**

Date **1/12/2022**

Designed by **IBRAHIM HZAYEN**

Case No

Company Project Number/Name

BMP Identification

BMP NAME / ID **DMA5**

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} = **0.68** 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)
DMA5	11752	Mixed Surface Types	0.81	0.61	7182.3			
	11752				7182.3	0.68	407	3134
		Total						

Notes:

Bioretention Facility - Design Procedure		BMP ID DMA1	Legend:	Required Entries
				Calculated Cells
Company Name:	HZAYEN DESIGN GROUP, INC.		Date:	1/12/2022
Designed by:	IBRAHIM HZAYEN		County/City Case No.:	
Design Volume				
Enter the area tributary to this feature			$A_T =$	1.6 acres
Enter V_{BMP} determined from Section 2.1 of this Handbook			$V_{BMP} =$	436 ft ³
Type of Bioretention Facility Design				
<input checked="" type="radio"/> Side slopes required (parallel to parking spaces or adjacent to walkways) <input type="radio"/> No side slopes required (perpendicular to parking space or Planter Boxes)				
Bioretention Facility Surface Area				
Depth of Soil Filter Media Layer			$d_S =$	1.5 ft
Top Width of Bioretention Facility, excluding curb			$w_T =$	28.0 ft
Total Effective Depth, d_E $d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$			$d_E =$	1.33 ft
Minimum Surface Area, A_m $A_M (ft^2) = \frac{V_{BMP} (ft^3)}{d_E (ft)}$			$A_M =$	330 ft ²
Proposed Surface Area			$A =$	1,088 ft ²
Bioretention Facility Properties				
Side Slopes in Bioretention Facility			$z =$	4 :1
Diameter of Underdrain				6 inches
Longitudinal Slope of Site (3% maximum)				1 %
6" Check Dam Spacing				25 feet
Describe Vegetation:			Shrubs	
Notes:	Basin oversized to provide an offset for offsite improvements. (758 sq. ft. for offsite improvements)			

Bioretention Facility - Design Procedure		BMP ID DMA 2	Legend:	Required Entries
				Calculated Cells
Company Name:	HZAYEN DESIGN GROUP, INC.		Date:	11/2/2022
Designed by:	IBRAHIM HZAYEN		County/City Case No.:	
Design Volume				
Enter the area tributary to this feature			$A_T =$	1.94 acres
Enter V_{BMP} determined from Section 2.1 of this Handbook			$V_{BMP} =$	528 ft ³
Type of Bioretention Facility Design				
<input type="radio"/> Side slopes required (parallel to parking spaces or adjacent to walkways) <input checked="" type="radio"/> No side slopes required (perpendicular to parking space or Planter Boxes)				
Bioretention Facility Surface Area				
Depth of Soil Filter Media Layer			$d_S =$	1.5 ft
Top Width of Bioretention Facility, excluding curb			$w_T =$	34.0 ft
Total Effective Depth, d_E				
$d_E = [(0.3) \times d_S + (0.4) \times 1] + 0.5$			$d_E =$	1.35 ft
Minimum Surface Area, A_m				
$A_M (ft^2) = \frac{V_{BMP} (ft^3)}{d_E (ft)}$			$A_M =$	392 ft ²
Proposed Surface Area			$A =$	2,042 ft ²
Minimum Required Length of Bioretention Facility, L			$L =$	11.5 ft
Bioretention Facility Properties				
Side Slopes in Bioretention Facility			$z =$	4 :1
Diameter of Underdrain				6 inches
Longitudinal Slope of Site (3% maximum)				1 %
6" Check Dam Spacing				25 feet
Describe Vegetation:			Shrubs	
Notes:	Basin oversized to provide an offset for offsite improvements.(1,644 sq.ft. for offsite improvements)			

Bioretention Facility - Design Procedure		BMP ID DMA3, 4 & 5	Legend:	Required Entries
				Calculated Cells
Company Name:	HZAYEN DESIGN GROUP, INC.		Date:	11/2/2022
Designed by:	IBRAHIM HZAYEN		County/City Case No.:	
Design Volume				
Enter the area tributary to this feature			$A_T =$	1.47 acres
Enter V_{BMP} determined from Section 2.1 of this Handbook			$V_{BMP} =$	2,162 ft ³
Type of Bioretention Facility Design				
<input checked="" type="radio"/> Side slopes required (parallel to parking spaces or adjacent to walkways) <input type="radio"/> No side slopes required (perpendicular to parking space or Planter Boxes)				
Bioretention Facility Surface Area				
Depth of Soil Filter Media Layer			$d_S =$	1.5 ft
Top Width of Bioretention Facility, excluding curb			$w_T =$	34.0 ft
Total Effective Depth, d_E $d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$			$d_E =$	1.33 ft
Minimum Surface Area, A_m $A_M (ft^2) = \frac{V_{BMP} (ft^3)}{d_E (ft)}$			$A_M =$	1,627 ft ²
Proposed Surface Area			$A =$	1,627 ft ²
Bioretention Facility Properties				
Side Slopes in Bioretention Facility			$z =$	4 :1
Diameter of Underdrain				6 inches
Longitudinal Slope of Site (3% maximum)				1 %
6" Check Dam Spacing				25 feet
Describe Vegetation:			Shrubs	
Notes: DMA3, DMA4 & DMA5 are offsite improvements mitigated onsite with oversizing WQMP basin 1 and basin 2 by 1,627 square feet.				

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern

Existing Runoff
2 Year Storm Event

2-year calcs

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Page 1

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
3.540	91	Fallow, bare soil, HSG C (1S)
3.540	91	TOTAL AREA

2-year calcs

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
3.540	HSG C	1S
0.000	HSG D	
0.000	Other	
3.540		TOTAL AREA

2-year calcs

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Type I 24-hr 2 Rainfall=3.20"

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Time span=0.00-24.00 hrs, dt=0.10 hrs, 241 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1A

Runoff Area=3.540 ac 0.00% Impervious Runoff Depth>2.23"

Flow Length=610' Slope=0.0066 '/' Tc=40.9 min CN=91/0 Runoff=2.34 cfs 0.658 af

Reach 4R: (new Reach)

Inflow=2.34 cfs 0.658 af

Outflow=2.34 cfs 0.658 af

Total Runoff Area = 3.540 ac Runoff Volume = 0.658 af Average Runoff Depth = 2.23"
100.00% Pervious = 3.540 ac 0.00% Impervious = 0.000 ac

2-year calcs

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Type I 24-hr 2 Rainfall=3.20"

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Summary for Subcatchment 1S: 1A

Runoff = 2.34 cfs @ 10.11 hrs, Volume= 0.658 af, Depth> 2.23"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type I 24-hr 2 Rainfall=3.20"

Area (ac)	CN	Description
3.540	91	Fallow, bare soil, HSG C
3.540	91	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	300	0.0066	0.25		Sheet Flow, 1A-1 Fallow n= 0.050 P2= 1.90"
19.8	300	0.0066	0.25		Sheet Flow, 1A-2 Fallow n= 0.050 P2= 1.90"
1.3	10	0.0066	0.13		Sheet Flow, 1A-2 Fallow n= 0.050 P2= 1.90"
40.9	610	Total			

2-year calcs

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Type I 24-hr 2 Rainfall=3.20"

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Hydrograph for Subcatchment 1S: 1A

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	0.00
0.10	0.01	0.00	0.00	0.00
0.20	0.01	0.00	0.00	0.00
0.30	0.02	0.00	0.00	0.00
0.40	0.02	0.00	0.00	0.00
0.50	0.03	0.00	0.00	0.00
0.60	0.03	0.00	0.00	0.00
0.70	0.04	0.00	0.00	0.00
0.80	0.04	0.00	0.00	0.00
0.90	0.05	0.00	0.00	0.00
1.00	0.06	0.00	0.00	0.00
1.10	0.06	0.00	0.00	0.00
1.20	0.07	0.00	0.00	0.00
1.30	0.07	0.00	0.00	0.00
1.40	0.08	0.00	0.00	0.00
1.50	0.08	0.00	0.00	0.00
1.60	0.09	0.00	0.00	0.00
1.70	0.10	0.00	0.00	0.00
1.80	0.10	0.00	0.00	0.00
1.90	0.11	0.00	0.00	0.00
2.00	0.11	0.00	0.00	0.00
2.10	0.12	0.00	0.00	0.00
2.20	0.12	0.00	0.00	0.00
2.30	0.13	0.00	0.00	0.00
2.40	0.14	0.00	0.00	0.00
2.50	0.14	0.00	0.00	0.00
2.60	0.15	0.00	0.00	0.00
2.70	0.15	0.00	0.00	0.00
2.80	0.16	0.00	0.00	0.00
2.90	0.17	0.00	0.00	0.00
3.00	0.17	0.00	0.00	0.00
3.10	0.18	0.00	0.00	0.00
3.20	0.19	0.00	0.00	0.00
3.30	0.19	0.00	0.00	0.00
3.40	0.20	0.00	0.00	0.00
3.50	0.21	0.00	0.00	0.00
3.60	0.21	0.00	0.00	0.00
3.70	0.22	0.00	0.00	0.00
3.80	0.23	0.00	0.00	0.00
3.90	0.24	0.00	0.00	0.00
4.00	0.24	0.00	0.00	0.01
4.10	0.25	0.00	0.00	0.01
4.20	0.26	0.00	0.00	0.01
4.30	0.27	0.00	0.00	0.01
4.40	0.27	0.01	0.00	0.02
4.50	0.28	0.01	0.00	0.02
4.60	0.29	0.01	0.00	0.02
4.70	0.30	0.01	0.00	0.03
4.80	0.30	0.01	0.00	0.03
4.90	0.31	0.01	0.00	0.03
5.00	0.32	0.01	0.00	0.03
5.10	0.33	0.02	0.00	0.04
5.20	0.34	0.02	0.00	0.04

2-year calcs

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Type I 24-hr 2 Rainfall=3.20"

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Hydrograph for Subcatchment 1S: 1A (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
5.30	0.34	0.02	0.00	0.04
5.40	0.35	0.02	0.00	0.05
5.50	0.36	0.02	0.00	0.05
5.60	0.37	0.02	0.00	0.05
5.70	0.38	0.03	0.00	0.06
5.80	0.38	0.03	0.00	0.06
5.90	0.39	0.03	0.00	0.06
6.00	0.40	0.03	0.00	0.07
6.10	0.41	0.04	0.00	0.07
6.20	0.42	0.04	0.00	0.07
6.30	0.43	0.04	0.00	0.08
6.40	0.44	0.05	0.00	0.08
6.50	0.45	0.05	0.00	0.09
6.60	0.46	0.05	0.00	0.09
6.70	0.47	0.06	0.00	0.10
6.80	0.48	0.06	0.00	0.11
6.90	0.49	0.07	0.00	0.11
7.00	0.50	0.07	0.00	0.12
7.10	0.51	0.08	0.00	0.13
7.20	0.52	0.08	0.00	0.13
7.30	0.53	0.09	0.00	0.14
7.40	0.55	0.09	0.00	0.15
7.50	0.56	0.10	0.00	0.15
7.60	0.57	0.10	0.00	0.16
7.70	0.58	0.11	0.00	0.17
7.80	0.60	0.11	0.00	0.17
7.90	0.61	0.12	0.00	0.18
8.00	0.62	0.13	0.00	0.19
8.10	0.63	0.13	0.00	0.19
8.20	0.65	0.14	0.00	0.20
8.30	0.66	0.15	0.00	0.21
8.40	0.68	0.16	0.00	0.23
8.50	0.70	0.17	0.00	0.25
8.60	0.72	0.18	0.00	0.26
8.70	0.74	0.19	0.00	0.29
8.80	0.76	0.21	0.00	0.31
8.90	0.79	0.22	0.00	0.33
9.00	0.81	0.24	0.00	0.36
9.10	0.84	0.25	0.00	0.39
9.20	0.87	0.27	0.00	0.42
9.30	0.90	0.29	0.00	0.46
9.40	0.93	0.31	0.00	0.50
9.50	0.97	0.34	0.00	0.55
9.60	1.02	0.37	0.00	0.62
9.70	1.11	0.43	0.00	0.77
9.80	1.24	0.54	0.00	1.06
9.90	1.48	0.73	0.00	1.62
10.00	1.65	0.86	0.00	2.20
10.10	1.70	0.91	0.00	2.34
10.20	1.75	0.95	0.00	2.24
10.30	1.80	0.99	0.00	2.12
10.40	1.83	1.02	0.00	2.00
10.50	1.87	1.05	0.00	1.87

2-year calcs

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Hydrograph for Subcatchment 1S: 1A (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
10.60	1.89	1.07	0.00	1.75
10.70	1.92	1.09	0.00	1.62
10.80	1.95	1.12	0.00	1.51
10.90	1.97	1.14	0.00	1.41
11.00	1.99	1.16	0.00	1.32
11.10	2.02	1.18	0.00	1.23
11.20	2.04	1.20	0.00	1.16
11.30	2.06	1.21	0.00	1.09
11.40	2.08	1.23	0.00	1.03
11.50	2.10	1.25	0.00	0.97
11.60	2.12	1.27	0.00	0.92
11.70	2.14	1.28	0.00	0.88
11.80	2.15	1.30	0.00	0.84
11.90	2.17	1.31	0.00	0.80
12.00	2.19	1.33	0.00	0.77
12.10	2.21	1.35	0.00	0.74
12.20	2.22	1.36	0.00	0.71
12.30	2.24	1.37	0.00	0.68
12.40	2.25	1.39	0.00	0.66
12.50	2.27	1.40	0.00	0.64
12.60	2.28	1.42	0.00	0.62
12.70	2.30	1.43	0.00	0.60
12.80	2.31	1.44	0.00	0.58
12.90	2.33	1.46	0.00	0.57
13.00	2.34	1.47	0.00	0.55
13.10	2.36	1.48	0.00	0.54
13.20	2.37	1.49	0.00	0.52
13.30	2.38	1.50	0.00	0.51
13.40	2.39	1.52	0.00	0.49
13.50	2.41	1.53	0.00	0.48
13.60	2.42	1.54	0.00	0.47
13.70	2.43	1.55	0.00	0.46
13.80	2.44	1.56	0.00	0.45
13.90	2.45	1.57	0.00	0.43
14.00	2.46	1.58	0.00	0.42
14.10	2.47	1.59	0.00	0.41
14.20	2.48	1.60	0.00	0.40
14.30	2.50	1.61	0.00	0.39
14.40	2.51	1.62	0.00	0.39
14.50	2.52	1.62	0.00	0.38
14.60	2.53	1.63	0.00	0.37
14.70	2.54	1.64	0.00	0.37
14.80	2.55	1.65	0.00	0.36
14.90	2.56	1.66	0.00	0.36
15.00	2.57	1.67	0.00	0.35
15.10	2.58	1.68	0.00	0.35
15.20	2.59	1.69	0.00	0.35
15.30	2.60	1.70	0.00	0.34
15.40	2.61	1.71	0.00	0.34
15.50	2.62	1.72	0.00	0.34
15.60	2.62	1.72	0.00	0.33
15.70	2.63	1.73	0.00	0.33
15.80	2.64	1.74	0.00	0.33

2-year calcs

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Type I 24-hr 2 Rainfall=3.20"

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Hydrograph for Subcatchment 1S: 1A (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
15.90	2.65	1.75	0.00	0.32
16.00	2.66	1.76	0.00	0.32
16.10	2.67	1.77	0.00	0.32
16.20	2.68	1.78	0.00	0.32
16.30	2.69	1.78	0.00	0.31
16.40	2.70	1.79	0.00	0.31
16.50	2.71	1.80	0.00	0.31
16.60	2.72	1.81	0.00	0.31
16.70	2.73	1.82	0.00	0.31
16.80	2.73	1.83	0.00	0.30
16.90	2.74	1.83	0.00	0.30
17.00	2.75	1.84	0.00	0.30
17.10	2.76	1.85	0.00	0.30
17.20	2.77	1.86	0.00	0.30
17.30	2.78	1.86	0.00	0.29
17.40	2.79	1.87	0.00	0.29
17.50	2.79	1.88	0.00	0.29
17.60	2.80	1.89	0.00	0.29
17.70	2.81	1.90	0.00	0.29
17.80	2.82	1.90	0.00	0.28
17.90	2.83	1.91	0.00	0.28
18.00	2.84	1.92	0.00	0.28
18.10	2.84	1.93	0.00	0.28
18.20	2.85	1.93	0.00	0.28
18.30	2.86	1.94	0.00	0.27
18.40	2.87	1.95	0.00	0.27
18.50	2.87	1.95	0.00	0.27
18.60	2.88	1.96	0.00	0.27
18.70	2.89	1.97	0.00	0.26
18.80	2.90	1.98	0.00	0.26
18.90	2.90	1.98	0.00	0.26
19.00	2.91	1.99	0.00	0.26
19.10	2.92	2.00	0.00	0.26
19.20	2.93	2.00	0.00	0.25
19.30	2.93	2.01	0.00	0.25
19.40	2.94	2.02	0.00	0.25
19.50	2.95	2.02	0.00	0.25
19.60	2.96	2.03	0.00	0.25
19.70	2.96	2.04	0.00	0.24
19.80	2.97	2.04	0.00	0.24
19.90	2.98	2.05	0.00	0.24
20.00	2.98	2.05	0.00	0.24
20.10	2.99	2.06	0.00	0.24
20.20	3.00	2.07	0.00	0.23
20.30	3.00	2.07	0.00	0.23
20.40	3.01	2.08	0.00	0.23
20.50	3.02	2.09	0.00	0.23
20.60	3.02	2.09	0.00	0.23
20.70	3.03	2.10	0.00	0.22
20.80	3.03	2.10	0.00	0.22
20.90	3.04	2.11	0.00	0.22
21.00	3.05	2.11	0.00	0.22
21.10	3.05	2.12	0.00	0.22

2-year calcs

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Type I 24-hr 2 Rainfall=3.20"

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Hydrograph for Subcatchment 1S: 1A (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
21.20	3.06	2.13	0.00	0.21
21.30	3.06	2.13	0.00	0.21
21.40	3.07	2.14	0.00	0.21
21.50	3.08	2.14	0.00	0.21
21.60	3.08	2.15	0.00	0.21
21.70	3.09	2.15	0.00	0.20
21.80	3.09	2.16	0.00	0.20
21.90	3.10	2.16	0.00	0.20
22.00	3.10	2.17	0.00	0.20
22.10	3.11	2.17	0.00	0.19
22.20	3.11	2.18	0.00	0.19
22.30	3.12	2.18	0.00	0.19
22.40	3.13	2.19	0.00	0.19
22.50	3.13	2.19	0.00	0.19
22.60	3.14	2.20	0.00	0.18
22.70	3.14	2.20	0.00	0.18
22.80	3.15	2.21	0.00	0.18
22.90	3.15	2.21	0.00	0.18
23.00	3.16	2.22	0.00	0.18
23.10	3.16	2.22	0.00	0.17
23.20	3.16	2.23	0.00	0.17
23.30	3.17	2.23	0.00	0.17
23.40	3.17	2.23	0.00	0.17
23.50	3.18	2.24	0.00	0.17
23.60	3.18	2.24	0.00	0.16
23.70	3.19	2.25	0.00	0.16
23.80	3.19	2.25	0.00	0.16
23.90	3.20	2.25	0.00	0.16
24.00	3.20	2.26	0.00	0.15

2-year calcs

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Summary for Reach 4R: (new Reach)

Inflow Area = 3.540 ac, 0.00% Impervious, Inflow Depth > 2.23" for 2 event
Inflow = 2.34 cfs @ 10.11 hrs, Volume= 0.658 af
Outflow = 2.34 cfs @ 10.11 hrs, Volume= 0.658 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs

2-year calcs

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Hydrograph for Reach 4R: (new Reach)

Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)
0.00	0.00		0.00	5.30	0.04		0.04
0.10	0.00		0.00	5.40	0.05		0.05
0.20	0.00		0.00	5.50	0.05		0.05
0.30	0.00		0.00	5.60	0.05		0.05
0.40	0.00		0.00	5.70	0.06		0.06
0.50	0.00		0.00	5.80	0.06		0.06
0.60	0.00		0.00	5.90	0.06		0.06
0.70	0.00		0.00	6.00	0.07		0.07
0.80	0.00		0.00	6.10	0.07		0.07
0.90	0.00		0.00	6.20	0.07		0.07
1.00	0.00		0.00	6.30	0.08		0.08
1.10	0.00		0.00	6.40	0.08		0.08
1.20	0.00		0.00	6.50	0.09		0.09
1.30	0.00		0.00	6.60	0.09		0.09
1.40	0.00		0.00	6.70	0.10		0.10
1.50	0.00		0.00	6.80	0.11		0.11
1.60	0.00		0.00	6.90	0.11		0.11
1.70	0.00		0.00	7.00	0.12		0.12
1.80	0.00		0.00	7.10	0.13		0.13
1.90	0.00		0.00	7.20	0.13		0.13
2.00	0.00		0.00	7.30	0.14		0.14
2.10	0.00		0.00	7.40	0.15		0.15
2.20	0.00		0.00	7.50	0.15		0.15
2.30	0.00		0.00	7.60	0.16		0.16
2.40	0.00		0.00	7.70	0.17		0.17
2.50	0.00		0.00	7.80	0.17		0.17
2.60	0.00		0.00	7.90	0.18		0.18
2.70	0.00		0.00	8.00	0.19		0.19
2.80	0.00		0.00	8.10	0.19		0.19
2.90	0.00		0.00	8.20	0.20		0.20
3.00	0.00		0.00	8.30	0.21		0.21
3.10	0.00		0.00	8.40	0.23		0.23
3.20	0.00		0.00	8.50	0.25		0.25
3.30	0.00		0.00	8.60	0.26		0.26
3.40	0.00		0.00	8.70	0.29		0.29
3.50	0.00		0.00	8.80	0.31		0.31
3.60	0.00		0.00	8.90	0.33		0.33
3.70	0.00		0.00	9.00	0.36		0.36
3.80	0.00		0.00	9.10	0.39		0.39
3.90	0.00		0.00	9.20	0.42		0.42
4.00	0.01		0.01	9.30	0.46		0.46
4.10	0.01		0.01	9.40	0.50		0.50
4.20	0.01		0.01	9.50	0.55		0.55
4.30	0.01		0.01	9.60	0.62		0.62
4.40	0.02		0.02	9.70	0.77		0.77
4.50	0.02		0.02	9.80	1.06		1.06
4.60	0.02		0.02	9.90	1.62		1.62
4.70	0.03		0.03	10.00	2.20		2.20
4.80	0.03		0.03	10.10	2.34		2.34
4.90	0.03		0.03	10.20	2.24		2.24
5.00	0.03		0.03	10.30	2.12		2.12
5.10	0.04		0.04	10.40	2.00		2.00
5.20	0.04		0.04	10.50	1.87		1.87

2-year calcs

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Hydrograph for Reach 4R: (new Reach) (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)
10.60	1.75		1.75	15.90	0.32		0.32
10.70	1.62		1.62	16.00	0.32		0.32
10.80	1.51		1.51	16.10	0.32		0.32
10.90	1.41		1.41	16.20	0.32		0.32
11.00	1.32		1.32	16.30	0.31		0.31
11.10	1.23		1.23	16.40	0.31		0.31
11.20	1.16		1.16	16.50	0.31		0.31
11.30	1.09		1.09	16.60	0.31		0.31
11.40	1.03		1.03	16.70	0.31		0.31
11.50	0.97		0.97	16.80	0.30		0.30
11.60	0.92		0.92	16.90	0.30		0.30
11.70	0.88		0.88	17.00	0.30		0.30
11.80	0.84		0.84	17.10	0.30		0.30
11.90	0.80		0.80	17.20	0.30		0.30
12.00	0.77		0.77	17.30	0.29		0.29
12.10	0.74		0.74	17.40	0.29		0.29
12.20	0.71		0.71	17.50	0.29		0.29
12.30	0.68		0.68	17.60	0.29		0.29
12.40	0.66		0.66	17.70	0.29		0.29
12.50	0.64		0.64	17.80	0.28		0.28
12.60	0.62		0.62	17.90	0.28		0.28
12.70	0.60		0.60	18.00	0.28		0.28
12.80	0.58		0.58	18.10	0.28		0.28
12.90	0.57		0.57	18.20	0.28		0.28
13.00	0.55		0.55	18.30	0.27		0.27
13.10	0.54		0.54	18.40	0.27		0.27
13.20	0.52		0.52	18.50	0.27		0.27
13.30	0.51		0.51	18.60	0.27		0.27
13.40	0.49		0.49	18.70	0.26		0.26
13.50	0.48		0.48	18.80	0.26		0.26
13.60	0.47		0.47	18.90	0.26		0.26
13.70	0.46		0.46	19.00	0.26		0.26
13.80	0.45		0.45	19.10	0.26		0.26
13.90	0.43		0.43	19.20	0.25		0.25
14.00	0.42		0.42	19.30	0.25		0.25
14.10	0.41		0.41	19.40	0.25		0.25
14.20	0.40		0.40	19.50	0.25		0.25
14.30	0.39		0.39	19.60	0.25		0.25
14.40	0.39		0.39	19.70	0.24		0.24
14.50	0.38		0.38	19.80	0.24		0.24
14.60	0.37		0.37	19.90	0.24		0.24
14.70	0.37		0.37	20.00	0.24		0.24
14.80	0.36		0.36	20.10	0.24		0.24
14.90	0.36		0.36	20.20	0.23		0.23
15.00	0.35		0.35	20.30	0.23		0.23
15.10	0.35		0.35	20.40	0.23		0.23
15.20	0.35		0.35	20.50	0.23		0.23
15.30	0.34		0.34	20.60	0.23		0.23
15.40	0.34		0.34	20.70	0.22		0.22
15.50	0.34		0.34	20.80	0.22		0.22
15.60	0.33		0.33	20.90	0.22		0.22
15.70	0.33		0.33	21.00	0.22		0.22
15.80	0.33		0.33	21.10	0.22		0.22

2-year calcs

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Type I 24-hr 2 Rainfall=3.20"

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Hydrograph for Reach 4R: (new Reach) (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)
21.20	0.21		0.21
21.30	0.21		0.21
21.40	0.21		0.21
21.50	0.21		0.21
21.60	0.21		0.21
21.70	0.20		0.20
21.80	0.20		0.20
21.90	0.20		0.20
22.00	0.20		0.20
22.10	0.19		0.19
22.20	0.19		0.19
22.30	0.19		0.19
22.40	0.19		0.19
22.50	0.19		0.19
22.60	0.18		0.18
22.70	0.18		0.18
22.80	0.18		0.18
22.90	0.18		0.18
23.00	0.18		0.18
23.10	0.17		0.17
23.20	0.17		0.17
23.30	0.17		0.17
23.40	0.17		0.17
23.50	0.17		0.17
23.60	0.16		0.16
23.70	0.16		0.16
23.80	0.16		0.16
23.90	0.16		0.16
24.00	0.15		0.15

***Proposed Runoff
2Year Storm Event***

1A-2-year_PROPOSED

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Page 1

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
3.540	89	Gravel roads, HSG C (1S)
3.540	89	TOTAL AREA

1A-2-year_PROPOSED

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
3.540	HSG C	1S
0.000	HSG D	
0.000	Other	
3.540		TOTAL AREA

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Time span=0.00-24.00 hrs, dt=0.10 hrs, 241 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1A-PROPOSED

Runoff Area=3.540 ac 0.00% Impervious Runoff Depth>2.05"

Flow Length=610' Slope=0.0066 '/' Tc=40.9 min CN=89/0 Runoff=2.13 cfs 0.606 af

Reach 4R: (new Reach)

Inflow=2.13 cfs 0.606 af

Outflow=2.13 cfs 0.606 af

Total Runoff Area = 3.540 ac Runoff Volume = 0.606 af Average Runoff Depth = 2.05"
100.00% Pervious = 3.540 ac 0.00% Impervious = 0.000 ac

1A-2-year_PROPOSED

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Summary for Subcatchment 1S: 1A-PROPOSED

Runoff = 2.13 cfs @ 10.11 hrs, Volume= 0.606 af, Depth> 2.05"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type I 24-hr 2 Rainfall=3.20"

Area (ac)	CN	Description
3.540	89	Gravel roads, HSG C
3.540	89	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	300	0.0066	0.25		Sheet Flow, 1A-1 Fallow n= 0.050 P2= 1.90"
19.8	300	0.0066	0.25		Sheet Flow, 1A-2 Fallow n= 0.050 P2= 1.90"
1.3	10	0.0066	0.13		Sheet Flow, 1A-3 Fallow n= 0.050 P2= 1.90"
40.9	610	Total			

1A-2-year_PROPOSED

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Hydrograph for Subcatchment 1S: 1A-PROPOSED

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	0.00
0.10	0.01	0.00	0.00	0.00
0.20	0.01	0.00	0.00	0.00
0.30	0.02	0.00	0.00	0.00
0.40	0.02	0.00	0.00	0.00
0.50	0.03	0.00	0.00	0.00
0.60	0.03	0.00	0.00	0.00
0.70	0.04	0.00	0.00	0.00
0.80	0.04	0.00	0.00	0.00
0.90	0.05	0.00	0.00	0.00
1.00	0.06	0.00	0.00	0.00
1.10	0.06	0.00	0.00	0.00
1.20	0.07	0.00	0.00	0.00
1.30	0.07	0.00	0.00	0.00
1.40	0.08	0.00	0.00	0.00
1.50	0.08	0.00	0.00	0.00
1.60	0.09	0.00	0.00	0.00
1.70	0.10	0.00	0.00	0.00
1.80	0.10	0.00	0.00	0.00
1.90	0.11	0.00	0.00	0.00
2.00	0.11	0.00	0.00	0.00
2.10	0.12	0.00	0.00	0.00
2.20	0.12	0.00	0.00	0.00
2.30	0.13	0.00	0.00	0.00
2.40	0.14	0.00	0.00	0.00
2.50	0.14	0.00	0.00	0.00
2.60	0.15	0.00	0.00	0.00
2.70	0.15	0.00	0.00	0.00
2.80	0.16	0.00	0.00	0.00
2.90	0.17	0.00	0.00	0.00
3.00	0.17	0.00	0.00	0.00
3.10	0.18	0.00	0.00	0.00
3.20	0.19	0.00	0.00	0.00
3.30	0.19	0.00	0.00	0.00
3.40	0.20	0.00	0.00	0.00
3.50	0.21	0.00	0.00	0.00
3.60	0.21	0.00	0.00	0.00
3.70	0.22	0.00	0.00	0.00
3.80	0.23	0.00	0.00	0.00
3.90	0.24	0.00	0.00	0.00
4.00	0.24	0.00	0.00	0.00
4.10	0.25	0.00	0.00	0.00
4.20	0.26	0.00	0.00	0.00
4.30	0.27	0.00	0.00	0.00
4.40	0.27	0.00	0.00	0.00
4.50	0.28	0.00	0.00	0.00
4.60	0.29	0.00	0.00	0.00
4.70	0.30	0.00	0.00	0.01
4.80	0.30	0.00	0.00	0.01
4.90	0.31	0.00	0.00	0.01
5.00	0.32	0.00	0.00	0.01
5.10	0.33	0.00	0.00	0.02
5.20	0.34	0.01	0.00	0.02

1A-2-year_PROPOSED

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Hydrograph for Subcatchment 1S: 1A-PROPOSED (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
5.30	0.34	0.01	0.00	0.02
5.40	0.35	0.01	0.00	0.02
5.50	0.36	0.01	0.00	0.03
5.60	0.37	0.01	0.00	0.03
5.70	0.38	0.01	0.00	0.03
5.80	0.38	0.01	0.00	0.03
5.90	0.39	0.02	0.00	0.04
6.00	0.40	0.02	0.00	0.04
6.10	0.41	0.02	0.00	0.04
6.20	0.42	0.02	0.00	0.05
6.30	0.43	0.02	0.00	0.05
6.40	0.44	0.02	0.00	0.05
6.50	0.45	0.03	0.00	0.06
6.60	0.46	0.03	0.00	0.06
6.70	0.47	0.03	0.00	0.07
6.80	0.48	0.04	0.00	0.07
6.90	0.49	0.04	0.00	0.08
7.00	0.50	0.04	0.00	0.08
7.10	0.51	0.05	0.00	0.09
7.20	0.52	0.05	0.00	0.10
7.30	0.53	0.05	0.00	0.10
7.40	0.55	0.06	0.00	0.11
7.50	0.56	0.06	0.00	0.11
7.60	0.57	0.07	0.00	0.12
7.70	0.58	0.07	0.00	0.13
7.80	0.60	0.08	0.00	0.13
7.90	0.61	0.08	0.00	0.14
8.00	0.62	0.09	0.00	0.14
8.10	0.63	0.09	0.00	0.15
8.20	0.65	0.10	0.00	0.16
8.30	0.66	0.11	0.00	0.17
8.40	0.68	0.11	0.00	0.18
8.50	0.70	0.12	0.00	0.20
8.60	0.72	0.13	0.00	0.21
8.70	0.74	0.14	0.00	0.23
8.80	0.76	0.15	0.00	0.25
8.90	0.79	0.16	0.00	0.27
9.00	0.81	0.18	0.00	0.30
9.10	0.84	0.19	0.00	0.32
9.20	0.87	0.21	0.00	0.35
9.30	0.90	0.23	0.00	0.39
9.40	0.93	0.25	0.00	0.43
9.50	0.97	0.27	0.00	0.47
9.60	1.02	0.30	0.00	0.53
9.70	1.11	0.35	0.00	0.67
9.80	1.24	0.44	0.00	0.93
9.90	1.48	0.62	0.00	1.45
10.00	1.65	0.74	0.00	1.99
10.10	1.70	0.79	0.00	2.13
10.20	1.75	0.83	0.00	2.04
10.30	1.80	0.86	0.00	1.94
10.40	1.83	0.89	0.00	1.84
10.50	1.87	0.92	0.00	1.72

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Hydrograph for Subcatchment 1S: 1A-PROPOSED (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
10.60	1.89	0.94	0.00	1.61
10.70	1.92	0.96	0.00	1.50
10.80	1.95	0.98	0.00	1.40
10.90	1.97	1.00	0.00	1.31
11.00	1.99	1.02	0.00	1.22
11.10	2.02	1.04	0.00	1.15
11.20	2.04	1.06	0.00	1.08
11.30	2.06	1.08	0.00	1.01
11.40	2.08	1.09	0.00	0.96
11.50	2.10	1.11	0.00	0.91
11.60	2.12	1.13	0.00	0.87
11.70	2.14	1.14	0.00	0.83
11.80	2.15	1.16	0.00	0.79
11.90	2.17	1.17	0.00	0.76
12.00	2.19	1.19	0.00	0.72
12.10	2.21	1.20	0.00	0.70
12.20	2.22	1.21	0.00	0.67
12.30	2.24	1.23	0.00	0.65
12.40	2.25	1.24	0.00	0.62
12.50	2.27	1.26	0.00	0.60
12.60	2.28	1.27	0.00	0.59
12.70	2.30	1.28	0.00	0.57
12.80	2.31	1.29	0.00	0.55
12.90	2.33	1.31	0.00	0.54
13.00	2.34	1.32	0.00	0.52
13.10	2.36	1.33	0.00	0.51
13.20	2.37	1.34	0.00	0.50
13.30	2.38	1.35	0.00	0.48
13.40	2.39	1.36	0.00	0.47
13.50	2.41	1.37	0.00	0.46
13.60	2.42	1.38	0.00	0.45
13.70	2.43	1.39	0.00	0.44
13.80	2.44	1.40	0.00	0.43
13.90	2.45	1.41	0.00	0.42
14.00	2.46	1.42	0.00	0.41
14.10	2.47	1.43	0.00	0.40
14.20	2.48	1.44	0.00	0.39
14.30	2.50	1.45	0.00	0.38
14.40	2.51	1.46	0.00	0.37
14.50	2.52	1.47	0.00	0.36
14.60	2.53	1.48	0.00	0.36
14.70	2.54	1.49	0.00	0.35
14.80	2.55	1.50	0.00	0.35
14.90	2.56	1.50	0.00	0.34
15.00	2.57	1.51	0.00	0.34
15.10	2.58	1.52	0.00	0.34
15.20	2.59	1.53	0.00	0.33
15.30	2.60	1.54	0.00	0.33
15.40	2.61	1.55	0.00	0.33
15.50	2.62	1.56	0.00	0.32
15.60	2.62	1.56	0.00	0.32
15.70	2.63	1.57	0.00	0.32
15.80	2.64	1.58	0.00	0.31

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Hydrograph for Subcatchment 1S: 1A-PROPOSED (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
15.90	2.65	1.59	0.00	0.31
16.00	2.66	1.60	0.00	0.31
16.10	2.67	1.61	0.00	0.31
16.20	2.68	1.61	0.00	0.31
16.30	2.69	1.62	0.00	0.30
16.40	2.70	1.63	0.00	0.30
16.50	2.71	1.64	0.00	0.30
16.60	2.72	1.65	0.00	0.30
16.70	2.73	1.65	0.00	0.29
16.80	2.73	1.66	0.00	0.29
16.90	2.74	1.67	0.00	0.29
17.00	2.75	1.68	0.00	0.29
17.10	2.76	1.68	0.00	0.29
17.20	2.77	1.69	0.00	0.29
17.30	2.78	1.70	0.00	0.28
17.40	2.79	1.71	0.00	0.28
17.50	2.79	1.72	0.00	0.28
17.60	2.80	1.72	0.00	0.28
17.70	2.81	1.73	0.00	0.28
17.80	2.82	1.74	0.00	0.27
17.90	2.83	1.74	0.00	0.27
18.00	2.84	1.75	0.00	0.27
18.10	2.84	1.76	0.00	0.27
18.20	2.85	1.77	0.00	0.27
18.30	2.86	1.77	0.00	0.26
18.40	2.87	1.78	0.00	0.26
18.50	2.87	1.79	0.00	0.26
18.60	2.88	1.79	0.00	0.26
18.70	2.89	1.80	0.00	0.26
18.80	2.90	1.81	0.00	0.25
18.90	2.90	1.81	0.00	0.25
19.00	2.91	1.82	0.00	0.25
19.10	2.92	1.83	0.00	0.25
19.20	2.93	1.83	0.00	0.25
19.30	2.93	1.84	0.00	0.24
19.40	2.94	1.85	0.00	0.24
19.50	2.95	1.85	0.00	0.24
19.60	2.96	1.86	0.00	0.24
19.70	2.96	1.87	0.00	0.24
19.80	2.97	1.87	0.00	0.23
19.90	2.98	1.88	0.00	0.23
20.00	2.98	1.88	0.00	0.23
20.10	2.99	1.89	0.00	0.23
20.20	3.00	1.90	0.00	0.23
20.30	3.00	1.90	0.00	0.23
20.40	3.01	1.91	0.00	0.22
20.50	3.02	1.91	0.00	0.22
20.60	3.02	1.92	0.00	0.22
20.70	3.03	1.93	0.00	0.22
20.80	3.03	1.93	0.00	0.22
20.90	3.04	1.94	0.00	0.21
21.00	3.05	1.94	0.00	0.21
21.10	3.05	1.95	0.00	0.21

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Hydrograph for Subcatchment 1S: 1A-PROPOSED (continued)

Time (hours)	Precip. (inches)	Perv.Excess (inches)	Imp.Excess (inches)	Runoff (cfs)
21.20	3.06	1.95	0.00	0.21
21.30	3.06	1.96	0.00	0.21
21.40	3.07	1.96	0.00	0.20
21.50	3.08	1.97	0.00	0.20
21.60	3.08	1.97	0.00	0.20
21.70	3.09	1.98	0.00	0.20
21.80	3.09	1.98	0.00	0.20
21.90	3.10	1.99	0.00	0.19
22.00	3.10	1.99	0.00	0.19
22.10	3.11	2.00	0.00	0.19
22.20	3.11	2.00	0.00	0.19
22.30	3.12	2.01	0.00	0.19
22.40	3.13	2.01	0.00	0.18
22.50	3.13	2.02	0.00	0.18
22.60	3.14	2.02	0.00	0.18
22.70	3.14	2.03	0.00	0.18
22.80	3.15	2.03	0.00	0.18
22.90	3.15	2.04	0.00	0.17
23.00	3.16	2.04	0.00	0.17
23.10	3.16	2.05	0.00	0.17
23.20	3.16	2.05	0.00	0.17
23.30	3.17	2.05	0.00	0.16
23.40	3.17	2.06	0.00	0.16
23.50	3.18	2.06	0.00	0.16
23.60	3.18	2.07	0.00	0.16
23.70	3.19	2.07	0.00	0.16
23.80	3.19	2.07	0.00	0.15
23.90	3.20	2.08	0.00	0.15
24.00	3.20	2.08	0.00	0.15

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Summary for Reach 4R: (new Reach)

Inflow Area = 3.540 ac, 0.00% Impervious, Inflow Depth > 2.05" for 2 event
Inflow = 2.13 cfs @ 10.11 hrs, Volume= 0.606 af
Outflow = 2.13 cfs @ 10.11 hrs, Volume= 0.606 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs

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Hydrograph for Reach 4R: (new Reach)

Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)
0.00	0.00		0.00	5.30	0.02		0.02
0.10	0.00		0.00	5.40	0.02		0.02
0.20	0.00		0.00	5.50	0.03		0.03
0.30	0.00		0.00	5.60	0.03		0.03
0.40	0.00		0.00	5.70	0.03		0.03
0.50	0.00		0.00	5.80	0.03		0.03
0.60	0.00		0.00	5.90	0.04		0.04
0.70	0.00		0.00	6.00	0.04		0.04
0.80	0.00		0.00	6.10	0.04		0.04
0.90	0.00		0.00	6.20	0.05		0.05
1.00	0.00		0.00	6.30	0.05		0.05
1.10	0.00		0.00	6.40	0.05		0.05
1.20	0.00		0.00	6.50	0.06		0.06
1.30	0.00		0.00	6.60	0.06		0.06
1.40	0.00		0.00	6.70	0.07		0.07
1.50	0.00		0.00	6.80	0.07		0.07
1.60	0.00		0.00	6.90	0.08		0.08
1.70	0.00		0.00	7.00	0.08		0.08
1.80	0.00		0.00	7.10	0.09		0.09
1.90	0.00		0.00	7.20	0.10		0.10
2.00	0.00		0.00	7.30	0.10		0.10
2.10	0.00		0.00	7.40	0.11		0.11
2.20	0.00		0.00	7.50	0.11		0.11
2.30	0.00		0.00	7.60	0.12		0.12
2.40	0.00		0.00	7.70	0.13		0.13
2.50	0.00		0.00	7.80	0.13		0.13
2.60	0.00		0.00	7.90	0.14		0.14
2.70	0.00		0.00	8.00	0.14		0.14
2.80	0.00		0.00	8.10	0.15		0.15
2.90	0.00		0.00	8.20	0.16		0.16
3.00	0.00		0.00	8.30	0.17		0.17
3.10	0.00		0.00	8.40	0.18		0.18
3.20	0.00		0.00	8.50	0.20		0.20
3.30	0.00		0.00	8.60	0.21		0.21
3.40	0.00		0.00	8.70	0.23		0.23
3.50	0.00		0.00	8.80	0.25		0.25
3.60	0.00		0.00	8.90	0.27		0.27
3.70	0.00		0.00	9.00	0.30		0.30
3.80	0.00		0.00	9.10	0.32		0.32
3.90	0.00		0.00	9.20	0.35		0.35
4.00	0.00		0.00	9.30	0.39		0.39
4.10	0.00		0.00	9.40	0.43		0.43
4.20	0.00		0.00	9.50	0.47		0.47
4.30	0.00		0.00	9.60	0.53		0.53
4.40	0.00		0.00	9.70	0.67		0.67
4.50	0.00		0.00	9.80	0.93		0.93
4.60	0.00		0.00	9.90	1.45		1.45
4.70	0.01		0.01	10.00	1.99		1.99
4.80	0.01		0.01	10.10	2.13		2.13
4.90	0.01		0.01	10.20	2.04		2.04
5.00	0.01		0.01	10.30	1.94		1.94
5.10	0.02		0.02	10.40	1.84		1.84
5.20	0.02		0.02	10.50	1.72		1.72

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Hydrograph for Reach 4R: (new Reach) (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)
10.60	1.61		1.61	15.90	0.31		0.31
10.70	1.50		1.50	16.00	0.31		0.31
10.80	1.40		1.40	16.10	0.31		0.31
10.90	1.31		1.31	16.20	0.31		0.31
11.00	1.22		1.22	16.30	0.30		0.30
11.10	1.15		1.15	16.40	0.30		0.30
11.20	1.08		1.08	16.50	0.30		0.30
11.30	1.01		1.01	16.60	0.30		0.30
11.40	0.96		0.96	16.70	0.29		0.29
11.50	0.91		0.91	16.80	0.29		0.29
11.60	0.87		0.87	16.90	0.29		0.29
11.70	0.83		0.83	17.00	0.29		0.29
11.80	0.79		0.79	17.10	0.29		0.29
11.90	0.76		0.76	17.20	0.29		0.29
12.00	0.72		0.72	17.30	0.28		0.28
12.10	0.70		0.70	17.40	0.28		0.28
12.20	0.67		0.67	17.50	0.28		0.28
12.30	0.65		0.65	17.60	0.28		0.28
12.40	0.62		0.62	17.70	0.28		0.28
12.50	0.60		0.60	17.80	0.27		0.27
12.60	0.59		0.59	17.90	0.27		0.27
12.70	0.57		0.57	18.00	0.27		0.27
12.80	0.55		0.55	18.10	0.27		0.27
12.90	0.54		0.54	18.20	0.27		0.27
13.00	0.52		0.52	18.30	0.26		0.26
13.10	0.51		0.51	18.40	0.26		0.26
13.20	0.50		0.50	18.50	0.26		0.26
13.30	0.48		0.48	18.60	0.26		0.26
13.40	0.47		0.47	18.70	0.26		0.26
13.50	0.46		0.46	18.80	0.25		0.25
13.60	0.45		0.45	18.90	0.25		0.25
13.70	0.44		0.44	19.00	0.25		0.25
13.80	0.43		0.43	19.10	0.25		0.25
13.90	0.42		0.42	19.20	0.25		0.25
14.00	0.41		0.41	19.30	0.24		0.24
14.10	0.40		0.40	19.40	0.24		0.24
14.20	0.39		0.39	19.50	0.24		0.24
14.30	0.38		0.38	19.60	0.24		0.24
14.40	0.37		0.37	19.70	0.24		0.24
14.50	0.36		0.36	19.80	0.23		0.23
14.60	0.36		0.36	19.90	0.23		0.23
14.70	0.35		0.35	20.00	0.23		0.23
14.80	0.35		0.35	20.10	0.23		0.23
14.90	0.34		0.34	20.20	0.23		0.23
15.00	0.34		0.34	20.30	0.23		0.23
15.10	0.34		0.34	20.40	0.22		0.22
15.20	0.33		0.33	20.50	0.22		0.22
15.30	0.33		0.33	20.60	0.22		0.22
15.40	0.33		0.33	20.70	0.22		0.22
15.50	0.32		0.32	20.80	0.22		0.22
15.60	0.32		0.32	20.90	0.21		0.21
15.70	0.32		0.32	21.00	0.21		0.21
15.80	0.31		0.31	21.10	0.21		0.21

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Hydrograph for Reach 4R: (new Reach) (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)
21.20	0.21		0.21
21.30	0.21		0.21
21.40	0.20		0.20
21.50	0.20		0.20
21.60	0.20		0.20
21.70	0.20		0.20
21.80	0.20		0.20
21.90	0.19		0.19
22.00	0.19		0.19
22.10	0.19		0.19
22.20	0.19		0.19
22.30	0.19		0.19
22.40	0.18		0.18
22.50	0.18		0.18
22.60	0.18		0.18
22.70	0.18		0.18
22.80	0.18		0.18
22.90	0.17		0.17
23.00	0.17		0.17
23.10	0.17		0.17
23.20	0.17		0.17
23.30	0.16		0.16
23.40	0.16		0.16
23.50	0.16		0.16
23.60	0.16		0.16
23.70	0.16		0.16
23.80	0.15		0.15
23.90	0.15		0.15
24.00	0.15		0.15

Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet (also see instructions in Section G of the WQMP Template):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your WQMP Exhibit.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in your WQMP. Use the format shown in Table G.1 on page 23 of this WQMP Template. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs for those shown here.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> A. On-site storm drain inlets	<input type="checkbox"/> Locations of inlets.	<input type="checkbox"/> Mark all inlets with the words “Only Rain Down the Storm Drain” or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.	<input type="checkbox"/> Maintain and periodically repaint or replace inlet markings. <input type="checkbox"/> Provide stormwater pollution prevention information to new site owners, lessees, or operators. <input type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com <input type="checkbox"/> Include the following in lease agreements: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”
<input type="checkbox"/> B. Interior floor drains and elevator shaft sump pumps		<input type="checkbox"/> State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.
<input type="checkbox"/> C. Interior parking garages		<input type="checkbox"/> State that parking garage floor drains will be plumbed to the sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> D1. Need for future indoor & structural pest control		<input type="checkbox"/> Note building design features that discourage entry of pests.	<input type="checkbox"/> Provide Integrated Pest Management information to owners, lessees, and operators.
<input type="checkbox"/> D2. Landscape/ Outdoor Pesticide Use	<input type="checkbox"/> Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. <input type="checkbox"/> Show self-retaining landscape areas, if any. <input type="checkbox"/> Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.)	<p>State that final landscape plans will accomplish all of the following.</p> <input type="checkbox"/> Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. <input type="checkbox"/> Design landscaping 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. <input type="checkbox"/> Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. <input type="checkbox"/> Consider using pest-resistant plants, especially adjacent to hardscape. <p>To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.</p>	<input type="checkbox"/> Maintain landscaping using minimum or no pesticides. <input type="checkbox"/> See applicable operational BMPs in “What you should know for.....Landscape and Gardening” at http://rcflood.org/stormwater/Error! <small>Hyperlink reference not valid.</small> <input type="checkbox"/> Provide IPM information to new owners, lessees and operators.

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> E. Pools, spas, ponds, decorative fountains, and other water features.	<input type="checkbox"/> Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. (Exception: Public pools must be plumbed according to County Department of Environmental Health Guidelines.)	If the Co-Permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	<input type="checkbox"/> See applicable operational BMPs in “Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain” at http://rcflood.org/stormwater/
<input type="checkbox"/> F. Food service	<input type="checkbox"/> For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. <input type="checkbox"/> On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	<input type="checkbox"/> Describe the location and features of the designated cleaning area. <input type="checkbox"/> Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	<input type="checkbox"/> See the brochure, “The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries” at http://rcflood.org/stormwater/ Provide this brochure to new site owners, lessees, and operators.
<input type="checkbox"/> G. Refuse areas	<input type="checkbox"/> Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. <input type="checkbox"/> If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. <input type="checkbox"/> Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	<input type="checkbox"/> State how site refuse will be handled and provide supporting detail to what is shown on plans. <input type="checkbox"/> State that signs will be posted on or near dumpsters with the words “Do not dump hazardous materials here” or similar.	<input type="checkbox"/> State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post “no hazardous materials” signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, “Waste Handling and Disposal” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> H. Industrial processes.	<input type="checkbox"/> Show process area.	<input type="checkbox"/> If industrial processes are to be located on site, state: “All process activities to be performed indoors. No processes to drain to exterior or to storm drain system.”	<input type="checkbox"/> See Fact Sheet SC-10, “Non-Stormwater Discharges” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com See the brochure “Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities” at http://rcflood.org/stormwater/

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<p><input type="checkbox"/> I. Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)</p>	<p><input type="checkbox"/> Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area.</p> <p><input type="checkbox"/> Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults.</p> <p><input type="checkbox"/> Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.</p>	<p>Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.</p> <p>Where appropriate, reference documentation of compliance with the requirements of Hazardous Materials Programs for:</p> <ul style="list-style-type: none"> ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank <p>www.cchealth.org/groups/hazmat/</p>	<p><input type="checkbox"/> See the Fact Sheets SC-31, “Outdoor Liquid Container Storage” and SC-33, “Outdoor Storage of Raw Materials ” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<p><input type="checkbox"/> J. Vehicle and Equipment Cleaning</p>	<p><input type="checkbox"/> Show on drawings as appropriate:</p> <p>(1) Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses.</p> <p>(2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use).</p> <p>(3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer.</p> <p>(4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.</p>	<p><input type="checkbox"/> If a car wash area is not provided, describe any measures taken to discourage on-site car washing and explain how these will be enforced.</p>	<p>Describe operational measures to implement the following (if applicable):</p> <p><input type="checkbox"/> Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. Refer to “Outdoor Cleaning Activities and Professional Mobile Service Providers” for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/</p> <p><input type="checkbox"/> Car dealerships and similar may rinse cars with water only.</p>

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<p><input type="checkbox"/> K. Vehicle/Equipment Repair and Maintenance</p>	<p><input type="checkbox"/> Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater.</p> <p><input type="checkbox"/> Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.</p> <p><input type="checkbox"/> Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.</p>	<p><input type="checkbox"/> State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area.</p> <p><input type="checkbox"/> State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency’s requirements.</p> <p><input type="checkbox"/> State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency’s requirements.</p>	<p>In the Stormwater Control Plan, note that all of the following restrictions apply to use the site:</p> <p><input type="checkbox"/> No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.</p> <p><input type="checkbox"/> No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.</p> <p><input type="checkbox"/> No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.</p> <p>Refer to “Automotive Maintenance & Car Care Best Management Practices for Auto Body Shops, Auto Repair Shops, Car Dealerships, Gas Stations and Fleet Service Operations”. Brochure can be found at http://rcflood.org/stormwater/</p> <p>Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/</p>

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> L. Fuel Dispensing Areas	<input type="checkbox"/> Fueling areas ⁶ shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. <input type="checkbox"/> Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area ¹ .] The canopy [or cover] shall not drain onto the fueling area.		<input type="checkbox"/> The property owner shall dry sweep the fueling area routinely. <input type="checkbox"/> See the Fact Sheet SD-30 , “Fueling Areas” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

⁶ The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> M. Loading Docks	<input type="checkbox"/> Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer. <input type="checkbox"/> Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. <input type="checkbox"/> Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.		<input type="checkbox"/> Move loaded and unloaded items indoors as soon as possible. <input type="checkbox"/> See Fact Sheet SC-30, “Outdoor Loading and Unloading,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> N. Fire Sprinkler Test Water		<input type="checkbox"/> Provide a means to drain fire sprinkler test water to the sanitary sewer.	<input type="checkbox"/> See the note in Fact Sheet SC-41, “Building and Grounds Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
<p>O. Miscellaneous Drain or Wash Water or Other Sources</p> <input type="checkbox"/> Boiler drain lines <input type="checkbox"/> Condensate drain lines <input type="checkbox"/> Rooftop equipment <input type="checkbox"/> Drainage sumps <input type="checkbox"/> Roofing, gutters, and trim. <input type="checkbox"/> Other sources		<input type="checkbox"/> Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. <input type="checkbox"/> Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. <input type="checkbox"/> Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. <input type="checkbox"/> Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. Include controls for other sources as specified by local reviewer.	

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> P. Plazas, sidewalks, and parking lots.			<input type="checkbox"/> 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.

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

Scope

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that post-construction stormwater Best Management Practices (BMPs) be performed on a recurring basis. The intent of the regulations is to ensure that the BMPs, on a continuing basis, efficiently remove pollutants from stormwater runoff, thereby preventing pollution of the nation's water resources. These requirements apply to the BioMod Modular Bioretention System.

Recommended Frequency of Service

Properly designed and installed bioretention cells require some regular maintenance, most frequently during the first year or two of establishment. Oldcastle Infrastructure recommends that installed BioMod units be inspected and serviced on a recurring basis for sediment buildup, trash removal, erosion, and to evaluate the health of the vegetation. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris and litter; however, it is recommended that each installation be serviced at least two times per year. Drainage Protection Systems (DPS), a division of Oldcastle Infrastructure, is available to do an onsite evaluation upon request.

Recommended Timing of Service

Guidelines for the timing of service are as follows:

1. For areas with a definitive rainy season: Prior to and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least two times per year).
3. For areas with winter snow and summer rain: Prior to and after the snow season.
4. For installed devices not subject to the elements (wash racks, parking garages, etc.):
On a recurring basis (no less than two times per year).

Service Procedures

1. Bioretention cells will require supplemental irrigation during the first 2-3 years after planting. Drought tolerant species may need little additional water after this period, except during prolonged drought, when supplemental irrigation may become necessary for plant survival. Verify that the maintenance plan includes a watering schedule for the establishment period and in times of extreme drought after plants have been established.
2. Inspect the inlet surface adjacent to the BioMod unit and the inlet opening for trash and debris accumulation. Remove and dispose as required.
3. For units with pre-filtration, open the access cover of the pre-filtration chamber and inspect for collected pollutants. Remove and dispose of all materials. (Pre-filtration chamber allows for the use of industrial vacuum equipment if available). Close pre-filter access cover.
4. For units with internal bypass overflow screens, check for any blockage or obstructions to the flow path and remove as necessary. Check for any potential future blockage or obstruction beneath and around the overflow screens. Remove and dispose of all materials.
5. Inspect the area beneath the tree grate (when applicable), and if necessary, remove the tree grate and dispose of any collected trash or debris.
6. For units without pre-filtration, remove and replace the mulch layer as necessary, taking care to disturb the plant's roots as little as possible. Units without pre-filtration may see more sediment enter the system. If sediment buildup reaches 25% of the ponding depth, it should be removed, taking care to minimize soil disturbance.

7. Inspect for standing water. If present, or if soil media is appreciably moist more than 72 hours following a rain event, carefully remove and replace the top 4-6 inches of soil media (as well as the mulch layer) taking care to disturb the plant's roots as little as possible. Mulch should be re-applied when erosion is evident. In areas expected to have low metal loads in the runoff, mulch is needed to maintain a 2-3 inch depth. In areas with relatively high metal loads, replace the mulch once per year.
8. While vegetation is being established, remove weeds by hand (weeding frequency should decrease over time, as the vegetation grows). Inspect and prune the plants as needed to maintain adequate shape and health. If vegetation appears to be in poor health with no obvious cause, a landscape specialist should be consulted. Although occasional pruning or trimming might be needed, bioretention cells should generally not be mowed on a regular basis. In some instances where it is desired to maintain fast-growing, annual herbaceous plant cover, annual mowing may be appropriate.
9. Replace dead plants. If a particular species proves to be prone to mortality, it may need to be replaced with a different species that is more likely to succeed on the particular site.

Disposal of Collected Debris, Hydrocarbons and Sediment

The collected debris, hydrocarbons and sediment shall be disposed of in accordance with local, state and federal agency requirements. Where hazardous materials are encountered, these standard maintenance procedures will be ceased immediately and the property owner notified for further work authorization.

DPS also has the capability of servicing all manner of catch basin inserts and catch basins with or without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined-space trained and certified. Call us at (888) 950-8826 for further information and assistance.

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

3.5 Bioretention Facility

Type of BMP	LID – Bioretention
Treatment Mechanisms	Infiltration, Evapotranspiration, Evaporation, Biofiltration
Maximum Drainage Area	This BMP is intended to be integrated into a project’s landscaped area in a distributed manner. Typically, contributing drainage areas to Bioretention Facilities range from less than 1 acre to a maximum of around 10 acres.
Other Names	Rain Garden, Bioretention Cell, Bioretention Basin, Biofiltration Basin, Landscaped Filter Basin, Porous Landscape Detention

Description

Bioretention Facilities are shallow, vegetated basins underlain by an engineered soil media. Healthy plant and biological activity in the root zone maintain and renew the macro-pore space in the soil and maximize plant uptake of pollutants and runoff. This keeps the Best Management Practice (BMP) from becoming clogged and allows more of the soil column to function as both a sponge (retaining water) and a highly effective and self-maintaining biofilter. In most cases, the bottom of a Bioretention Facility is unlined, which also provides an opportunity for infiltration to the extent the underlying onsite soil can accommodate. When the infiltration rate of the underlying soil is exceeded, fully biotreated flows are discharged via underdrains. Bioretention Facilities therefore will inherently achieve the maximum feasible level of infiltration and evapotranspiration and achieve the minimum feasible (but highly biotreated) discharge to the storm drain system.

Siting Considerations

These facilities work best when they are designed in a relatively level area. Unlike other BMPs, Bioretention Facilities can be used in smaller landscaped spaces on the site, such as:

- ✓ Parking islands
- ✓ Medians
- ✓ Site entrances

Landscaped areas on the site (such as may otherwise be required through minimum landscaping ordinances), can often be designed as Bioretention Facilities. This can be accomplished by:

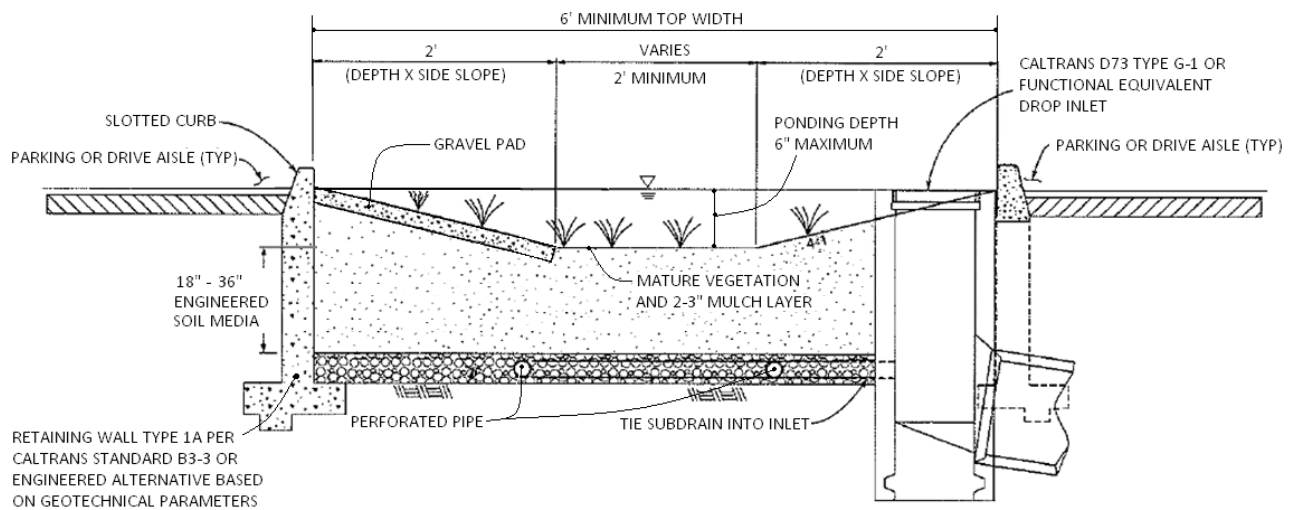
- *Depressing* landscaped areas below adjacent impervious surfaces, rather than elevating those areas
- Grading the site to direct runoff from those impervious surfaces *into* the Bioretention Facility, rather than away from the landscaping
- Sizing and designing the depressed landscaped area as a Bioretention Facility as described in this Fact Sheet

Bioretention Facilities should however not be used downstream of areas where large amounts of sediment can clog the system. Placing a Bioretention Facility at the toe of a steep slope should also be avoided due to the potential for clogging the engineered soil media with erosion from the slope, as well as the potential for damaging the vegetation.

Design and Sizing Criteria

The recommended cross section necessary for a Bioretention Facility includes:

- Vegetated area
- 18' minimum depth of engineered soil media
- 12' minimum gravel layer depth with 6' perforated pipes (added flow control features such as orifice plates may be required to mitigate for HCOC conditions)



While the 18-inch minimum engineered soil media depth can be used in some cases, it is recommended to use 24 inches or a preferred 36 inches to provide an adequate root zone for the chosen plant palate. Such a design also provides for improved removal effectiveness for nutrients. The recommended ponding depth inside of a Bioretention Facility is 6 inches; measured from the flat bottom surface to the top of the water surface as shown in Figure 1.

Because this BMP is filled with an engineered soil media, pore space in the soil and gravel layer is assumed to provide storage volume. However, several considerations must be noted:

- Surcharge storage above the soil surface (6 inches) is important to assure that design flows do not bypass the BMP when runoff exceeds the soil's absorption rate.
- In cases where the Bioretention Facility contains engineered soil media deeper than 36 inches, the pore space within the engineered soil media can only be counted to the 36-inch depth.
- A maximum of 30 percent pore space can be used for the soil media whereas a maximum of 40 percent pore space can be use for the gravel layer.

Figure 1: Standard Layout for a Bioretention Facility

BIORETENTION FACILITY BMP FACT SHEET

Engineered Soil Media Requirements

The engineered soil media shall be comprised of 85 percent mineral component and 15 percent organic component, by volume, drum mixed prior to placement. The mineral component shall be a Class A sandy loam topsoil that meets the range specified in Table 1 below. The organic component shall be nitrogen stabilized compost¹, such that nitrogen does not leach from the media.

Table 1: Mineral Component Range Requirements

Percent Range	Component
70-80	Sand
15-20	Silt
5-10	Clay

The trip ticket, or certificate of compliance, shall be made available to the inspector to prove the engineered mix meets this specification.

Vegetation Requirements

Vegetative cover is important to minimize erosion and ensure that treatment occurs in the Bioretention Facility. The area should be designed for at least 70 percent mature coverage throughout the Bioretention Facility. To prevent the BMP from being used as walkways, Bioretention Facilities shall be planted with a combination of small trees, densely planted shrubs, and natural grasses. Grasses shall be native or ornamental; preferably ones that do not need to be mowed. The application of fertilizers and pesticides should be minimal. To maintain oxygen levels for the vegetation and promote biodegradation, it is important that vegetation not be completely submerged for any extended period of time. Therefore, a maximum of 6 inches of ponded water shall be used in the design to ensure that plants within the Bioretention Facility remain healthy.

A 2 to 3-inch layer of standard shredded aged hardwood mulch shall be placed as the top layer inside the Bioretention Facility. The 6-inch ponding depth shown in Figure 1 above shall be measured from the top surface of the 2 to 3-inch mulch layer.

Curb Cuts

To allow water to flow into the Bioretention Facility, 1-foot-wide (minimum) curb cuts should be placed approximately every 10 feet around the perimeter of the Bioretention Facility. Figure 2 shows a curb cut in a Bioretention Facility. Curb cut flow lines must be at or above the V_{BMP} water surface level.

¹ For more information on compost, visit the US Composting Council website at: <http://compostingcouncil.org/>

BIORETENTION FACILITY BMP FACT SHEET



Figure 2: Curb Cut located in a Bioretention Facility

To reduce erosion, a gravel pad shall be placed at each inlet point to the Bioretention Facility. The gravel should be 1- to 1.5-inch diameter in size. The gravel should overlap the curb cut opening a minimum of 6 inches. The gravel pad inside the Bioretention Facility should be flush with the finished surface at the curb cut and extend to the bottom of the slope.

In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet. See Figure 3.

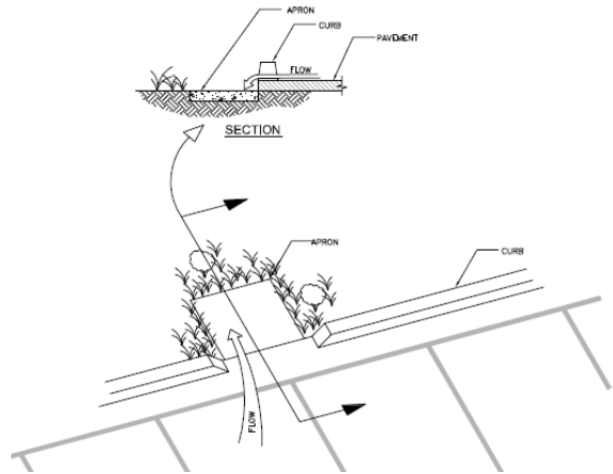


Figure 3: Apron located in a Bioretention Facility

Terracing the Landscaped Filter Basin

It is recommended that Bioretention Facilities be level. In the event the facility site slopes and lacks proper design, water would fill the lowest point of the BMP and then discharge from the basin without being treated. To ensure that the water will be held within the Bioretention Facility on sloped sites, the BMP must be terraced with nonporous check dams to provide the required storage and treatment capacity.

The terraced version of this BMP shall be used on non-flat sites with no more than a 3 percent slope. The surcharge depth cannot exceed 0.5 feet, and side slopes shall not exceed 4:1. Table 2 below shows the spacing of the check dams, and slopes shall be rounded up (i.e., 2.5 percent slope shall use 10' spacing for check dams).

Table 2: Check Dam Spacing

6" Check Dam Spacing	
Slope	Spacing
1%	25'
2%	15'
3%	10'

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Roof Runoff

Roof downspouts may be directed towards Bioretention Facilities. However, the downspouts must discharge onto a concrete splash block to protect the Bioretention Facility from erosion.

Retaining Walls

It is recommended that Retaining Wall Type 1A, per Caltrans Standard B3-3 or equivalent, be constructed around the entire perimeter of the Bioretention Facility. This practice will protect the sides of the Bioretention Facility from collapsing during construction and maintenance or from high service loads adjacent to the BMP. Where such service loads would not exist adjacent to the BMP, an engineered alternative may be used if signed by a licensed civil engineer.

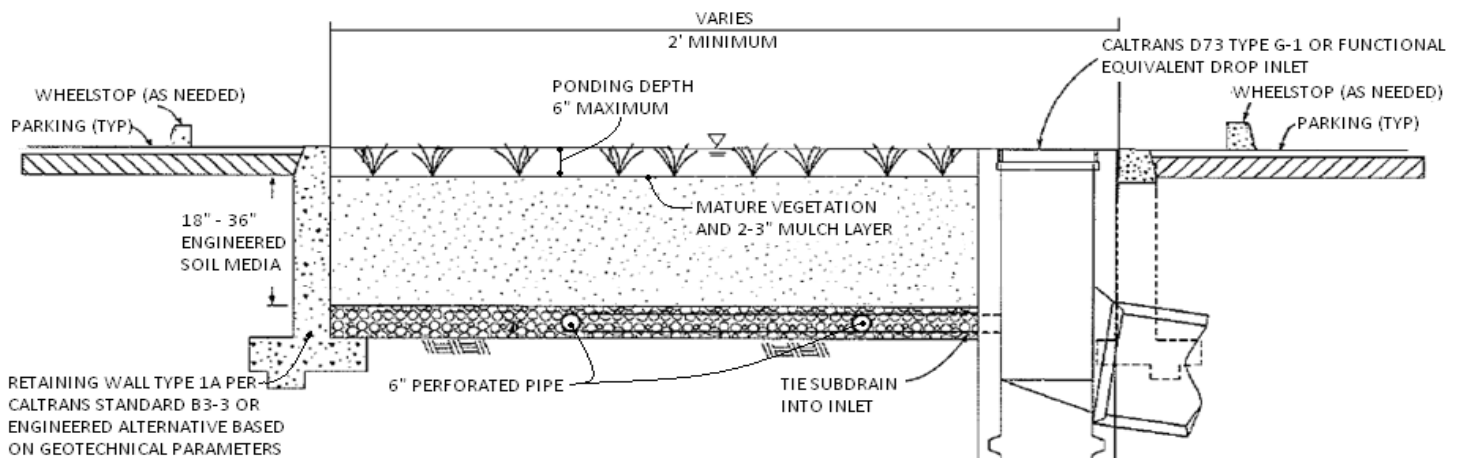
Side Slope Requirements

Bioretention Facilities Requiring Side Slopes

The design should assure that the Bioretention Facility does not present a tripping hazard. Bioretention Facilities proposed near pedestrian areas, such as areas parallel to parking spaces or along a walkway, must have a gentle slope to the bottom of the facility. Side slopes inside of a Bioretention Facility shall be 4:1. A typical cross section for the Bioretention Facility is shown in Figure 1.

Bioretention Facilities Not Requiring Side Slopes

Where cars park perpendicular to the Bioretention Facility, side slopes are not required. A 6-inch maximum drop may be used, and the Bioretention Facility must be planted with trees and shrubs to prevent pedestrian access. In this case, a curb is not placed around the Bioretention Facility, but wheel stops shall be used to prevent vehicles from entering the Bioretention Facility, as shown in Figure 4.



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Planter Boxes

Bioretention Facilities can also be placed above ground as planter boxes. Planter boxes must have a minimum width of 2 feet, a maximum surcharge depth of 6 inches, and no side slopes are necessary. Planter boxes must be constructed so as to ensure that the top surface of the engineered soil media will remain level. This option may be constructed of concrete, brick, stone or other stable materials that will not warp or bend. Chemically treated wood or galvanized steel, which has the ability to contaminate stormwater, should not be used. Planter boxes must be lined with an impermeable liner on all sides, including the bottom. Due to the impermeable liner, the inside bottom of the planter box shall be designed and constructed with a cross fall, directing treated flows within the subdrain layer toward the point where subdrain exits the planter box, and subdrains shall be oriented with drain holes oriented down. These provisions will help avoid excessive stagnant water within the gravel underdrain layer. Similar to the in-ground Bioretention Facility versions, this BMP benefits from healthy plants and biological activity in the root zone. Planter boxes should be planted with appropriately selected vegetation.



Figure 5: Planter Box

Source: LA Team Effort

Overflow

An overflow route is needed in the Bioretention Facility design to bypass stored runoff from storm events larger than V_{BMP} or in the event of facility or subdrain clogging. Overflow systems must connect to an acceptable discharge point, such as a downstream conveyance system as shown in Figure 1 and Figure 4. The inlet to the overflow structure shall be elevated inside the Bioretention Facility to be flush with the ponding surface for the design capture volume (V_{BMP}) as shown in Figure 4. This will allow the design capture volume to be fully treated by the Bioretention Facility, and for larger events to safely be conveyed to downstream systems. The overflow inlet shall **not** be located in the entrance of a Bioretention Facility, as shown in Figure 6.

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Underdrain Gravel and Pipes

An underdrain gravel layer and pipes shall be provided in accordance with Appendix B – Underdrains.



Figure 6: Incorrect Placement of an Overflow Inlet.

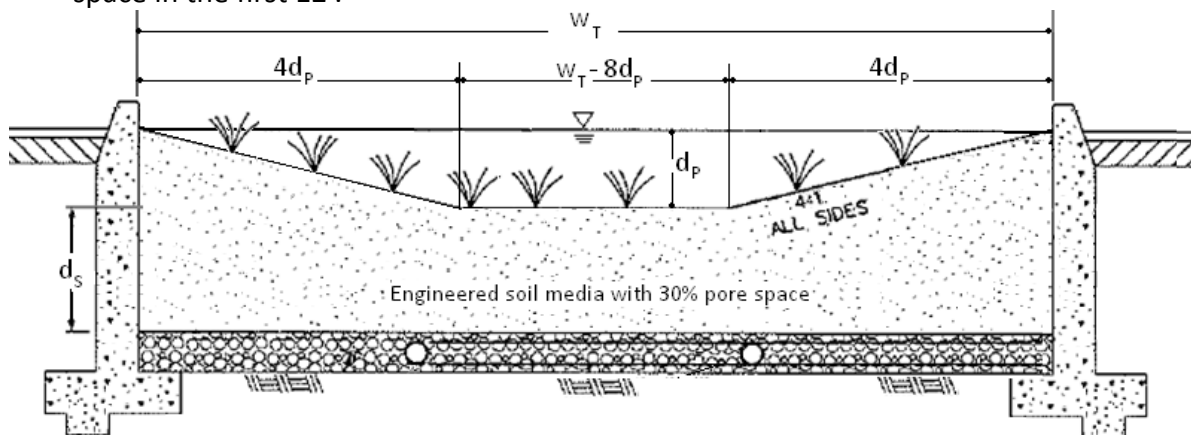
Inspection and Maintenance Schedule

The Bioretention Facility area shall be inspected for erosion, dead vegetation, soggy soils, or standing water. The use of fertilizers and pesticides on the plants inside the Bioretention Facility should be minimized.

Schedule	Activity
Ongoing	<ul style="list-style-type: none">• Keep adjacent landscape areas maintained. Remove clippings from landscape maintenance activities.• Remove trash and debris• Replace damaged grass and/or plants• Replace surface mulch layer as needed to maintain a 2-3 inch soil cover.
After storm events	<ul style="list-style-type: none">• Inspect areas for ponding
Annually	<ul style="list-style-type: none">• Inspect/clean inlets and outlets

Bioretention Facility Design Procedure

- 1) Enter the area tributary, A_T , to the Bioretention Facility.
- 2) Enter the Design Volume, V_{BMP} , determined from Section 2.1 of this Handbook.
- 3) Select the type of design used. There are two types of Bioretention Facility designs: the standard design used for most project sites that include side slopes, and the modified design used when the BMP is located perpendicular to the parking spaces or with planter boxes that do not use side slopes.
- 4) Enter the depth of the engineered soil media, d_s . The minimum depth for the engineered soil media can be 18' in limited cases, but it is recommended to use 24' or a preferred 36' to provide an adequate root zone for the chosen plant palette. Engineered soil media deeper than 36' will only get credit for the pore space in the first 36'.
- 5) Enter the top width of the Bioretention Facility.
- 6) Calculate the total effective depth, d_E , within the Bioretention Facility. The maximum allowable pore space of the soil media is 30% while the maximum allowable pore space for the gravel layer is 40%. Gravel layer deeper than 12' will only get credit for the pore space in the first 12'.



- a. For the design with side slopes the following equation shall be used to determine the total effective depth. Where, d_p is the depth of ponding within the basin.

$$d_E(\text{ft}) = \frac{0.3 \times \left[(w_T(\text{ft}) \times d_s(\text{ft})) + 4(d_p(\text{ft}))^2 \right] + 0.4 \times 1(\text{ft}) + d_p(\text{ft}) \left[4d_p(\text{ft}) + (w_T(\text{ft}) - 8d_p(\text{ft})) \right]}{w_T(\text{ft})}$$

This above equation can be simplified if the maximum ponding depth of 0.5' is used. The equation below is used on the worksheet to find the minimum area required for the Bioretention Facility:

$$d_E(\text{ft}) = (0.3 \times d_s(\text{ft}) + 0.4 \times 1(\text{ft})) - \left(\frac{0.7(\text{ft}^2)}{w_T(\text{ft})} \right) + 0.5(\text{ft})$$

- b. For the design without side slopes the following equation shall be used to determine the total effective depth:

$$d_E(\text{ft}) = d_p(\text{ft}) + [(0.3) \times d_s(\text{ft}) + (0.4) \times 1(\text{ft})]$$

The equation below, using the maximum ponding depth of 0.5', is used on the worksheet to find the minimum area required for the Bioretention Facility:

$$d_E(\text{ft}) = 0.5 (\text{ft}) + [(0.3) \times d_s(\text{ft}) + (0.4) \times 1(\text{ft})]$$

- 7) Calculate the minimum surface area, A_M , required for the Bioretention Facility. This does not include the curb surrounding the Bioretention Facility or side slopes.

$$A_M(\text{ft}^2) = \frac{V_{\text{BMP}}(\text{ft}^3)}{d_E (\text{ft})}$$

- 8) Enter the proposed surface area. This area shall not be less than the minimum required surface area.
- 9) Verify that side slopes are no steeper than 4:1 in the standard design, and are not required in the modified design.
- 10) Provide the diameter, minimum 6 inches, of the perforated underdrain used in the Bioretention Facility. See Appendix B for specific information regarding perforated pipes.
- 11) Provide the slope of the site around the Bioretention Facility, if used. The maximum slope is 3 percent for a standard design.
- 12) Provide the check dam spacing, if the site around the Bioretention Facility is sloped.
- 13) Describe the vegetation used within the Bioretention Facility.

References Used to Develop this Fact Sheet

Anderson, Dale V. "Landscaped Filter Basin Soil Requirements." Riverside, May 2010.

California Department of Transportation. CalTrans Standard Plans. 15 September 2005. May 2010 <http://www.dot.ca.gov/hq/esc/oe/project_plans/HTM/stdplns-met-new99.htm>.

Camp Dresser and McKee Inc.; Larry Walker Associates. California Stormwater Best Management Practice Handbook for New Development and Redevelopment. California Stormwater Quality Association (CASQA), 2004.

Contra Costa Clean Water Program. Stormwater Quality Requirements for Development Applications. 3rd Edition. Contra Costa, 2006.

County of Los Angeles Public Works. Stormwater Best Management Practice Design and Maintenance Manual. Los Angeles, 2009.

Kim, Hunho, Eric A. Seagren and Allen P. Davis. "Engineered Bioretention for Removal of Nitrate from Stormwater Runoff." Water Environment Research 75.4 (2003): 355-366.

LA Team Effort. LA Team Effort: FREE Planter Boxes for Businesses. 2 November 2009. May 2010 <<http://lateameffort.blogspot.com/2009/11/free-planter-boxes-for-businesses-est.html>>.

Montgomery County Maryland Department of Permitting Services Water Resources Section. Biofiltration (BF). Montgomery County, 2005.

Program, Ventura Countywide Stormwater Quality Management. Technical Guidance Manual for Stormwater Quality Control Measures. Ventura, 2002.

United States Environmental Protection Agency. Storm Water Technology Fact Sheet Bioretention. Washington D.C, 1999.

Urban Drainage and Flood Control District. Urban Storm Drainage Criteria Manual Volume 3 - Best Management Practices. Vol. 3. Denver, 2008. 3 vols.

Urbonas, Ben R. Stormwater Sand Filter Sizing and Design: A Unit Operations Approach. Denver: Urban Drainage and Flood Control District, 2002.