



## AGENDA

### PLANNING COMMISSION REGULAR MEETING VIRTUAL PLANNING COMMISSION REGULAR MEETING

**TUESDAY, OCTOBER 27, 2020  
7:00 P.M.**

To protect our residents, officials, and staff, and aligned with the Governor's executive order to Shelter-at-Home, this meeting is being conducted utilizing teleconferencing means consistent with State order that that allows the public to address the local legislative body electronically.

#### **Location:**

Instructions for Virtual Planning Commission Regular Meeting

To follow or participate in the meeting:

1. Videoconference:
  - a. Follow the meeting on-line, click here to register:  
[https://us02web.zoom.us/webinar/register/WN\\_ZiYoGtj0RSGFVMcRKW33qw](https://us02web.zoom.us/webinar/register/WN_ZiYoGtj0RSGFVMcRKW33qw)
  - b. After clicking on the URL, please take a few seconds to submit your first name, last name, and e-mail address, then click "Register" which will approve your registration and a new URL to join the meeting will appear.
2. Phone-in:
  - a. Once registered, you will receive an e-mail with instructions to join the meeting telephonically, and then dial 877-853-5257 (Toll Free) using the Webinar ID and Password found in the e-mail.
3. E-mail Public Comments:
  - a. If preferred, please E-mail Public Comments to Community Development Director Matthew Feske at [mfeske@ci.clayton.ca.us](mailto:mfeske@ci.clayton.ca.us) by 5:00 P.M. on the day of the Planning Commission meeting. All E-mailed Public Comments will be forwarded to the entire Planning Commission.

For those who choose to attend the meeting via videoconferencing or telephone shall have three minutes for public comments.

- A complete agenda packet is available for public review on the City's website at [www.ci.clayton.ca.us](http://www.ci.clayton.ca.us)
- Agendas are posted at: 1) City Hall, 6000 Heritage Trail, Clayton; 2) Library, 6125 Clayton Road, Clayton; 3) Ohm's Bulletin Board, 1028 Diablo Street, Clayton; and 4) City Website at [www.ci.clayton.ca.us](http://www.ci.clayton.ca.us)
- If you have special accommodation requirements to participate, please call the Community Development Department office at least 72 hours in advance of the meeting at 925-673-7300.

## CALL TO ORDER

### 1. PLEDGE OF ALLEGIANCE

### 2. ROLL CALL

### 3. PRESENTATION AND ANNOUNCEMENTS:

#### A. PRESENTATIONS:

None.

#### B. ANNOUNCEMENTS:

None.

### 4. ACCEPTANCE OF THE AGENDA:

The Planning Commission will discuss the order of the agenda, may amend the order, add urgency items, note abstentions or "no" votes on Consent Calendar items, and request Consent Calendar items be removed from the Consent Calendar for discussion. The Planning Commission may also remove items from the Consent Calendar prior to that portion of the Agenda.

### 5. PUBLIC COMMENT (Non-Agenda Items):

This time has been set aside for members of the public to address the Planning Commission on items of general interest within the subject matter jurisdiction of the City. Although the Planning Commission values your comments, pursuant to the Brown Act, the Planning Commission generally cannot take any action on items not listed on the posted agenda. Three (3) minutes will be assigned to each speaker.

### 6. CONSENT CALENDAR

*The following routine matters may be acted upon by one motion. Individual items may be removed by the Planning Commission for separate discussion at this time or under Acceptance of the Agenda. The ordinance title is deemed to be read in its entirety and further reading waived on any ordinance listed on the Consent Calendar.*

#### A. MINUTES:

##### RECOMMENDATION:

Approve the Planning Commission Minutes of October 13, 2020.

### 7. PUBLIC HEARINGS

#### A. PUBLIC HEARING TO REVIEW AND CONSIDER THE EIGHTEEN RESIDENTIAL-LOT PLANNED DEVELOPMENT PROJECT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION ENV-01-2020; ZONING MAP AMENDMENT ZOA-02-2020; VESTING TENTATIVE RESIDENTIAL SUBDIVISION MAP MAP-01-2020; DEVELOPMENT PLAN PERMIT DP-01-2020; AND TREE REMOVAL PERMIT TRP-09-2020.

##### RECOMMENDATION:

Staff recommends that the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive, and consider any public testimony, and if determined to be appropriate:

1. Approve Planning Commission Resolution No. \_\_\_\_\_ (Attachment B) recommending the City Council adopt the Diablo Meadows Residential

Subdivision Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-20); and

2. Approve Planning Commission Resolution No. \_\_\_\_\_ (Attachment C) recommending City Council approval of Ordinance No. \_\_\_\_\_ (Attachment D) for a rezone of the project site from R-15 to Planned Development District (PD) and Text modification to CMC 17.78.040 - Exemptions (PD Lot Coverage areas) for the Diablo Meadows Residential Subdivision Planned Development Project (ZOA-02-20); and
3. Approve Planning Commission Resolution No. \_\_\_\_\_ (Attachment E) recommending City Council approval of the Diablo Meadows Residential Subdivision Planned Development Project Development Plan (DP-01-20), Tentative Subdivision Map (MAP-01-20), Development Review Permit (DP-1-20), and Tree Removal Permit (TRP-9-20) for an eighteen-lot residential subdivision.

#### **Alternative Recommendation**

1. Request staff draft a resolution recommending that the City Council deny the Rezone, Vesting Tentative Map, Development Plan Review Permit, and Tree Removal Permit.

#### **8. ACTION ITEMS**

A. None

#### **9. PLANNING COMMISSION REQUESTS AND UPCOMING AGENDA DEVELOPMENT**

This time is set aside for the Planning Commission to make requests of staff, and/or issues of concern to Planning Commissioners are briefly presented, prioritized, and set for future meeting dates.

#### **10. ADJOURNMENT**

The next Planning Commission Regular Meeting is Tuesday, November 10, 2020.



## MINUTES

### PLANNING COMMISSION REGULAR MEETING VIRTUAL PLANNING COMMISSION REGULAR MEETING

TUESDAY, October 13, 2020  
7:00 P.M.

#### CALL TO ORDER 7:00 P.M.

**1. PLEDGE OF ALLEGIANCE**

**2. ROLL CALL**

Chair A.J. Chippero, Vice Chair Terri Denslow, Commissioner Bassam Altwal, Commissioner Peter Cloven, and Commissioner Frank Gavidia.

**3. PRESENTATION AND ANNOUNCEMENTS:**

**A. Presentations:**

None.

**B. Announcements:**

None.

**4. ACCEPTANCE OF THE AGENDA:**

Planning Commission – Consensus (5-0) - Accepted the agenda.

**5. PUBLIC COMMENT (Non-Agenda Items):**

Citizen Dee Divera - Remarked on candidate Gavidia's video with the rendering and that it was not the original rendering and that the original elevations and materials were quite nice. Remarked on the misleading the public of stopping projects and the expectation is to look at the projects objectively and follow all the laws, including State mandates and the Housing Element mandates.

Citizen Karen Amos – Submitted and email and read the email (attached to minutes).

Citizen Bassam Altwal – Remarked on the email not be distributed or read. Director Feske apologized for not distributing and noted for the record that the email will be a part of the record. Remarked on candidate Gavidia representation of the Olivia project and expressed that the project was misrepresented and that candidate Gavidia should correct it and apologize for it.

**6. CONSENT CALENDAR**

Motion and Vote 5-0-0 to approve the consent calendar

**A. MINUTES:**

Planning Commission Minutes of September 22, 2020.

**7. PUBLIC HEARINGS**

**A. PUBLIC HEARING TO REVIEW AND CONSIDER THE SIX-LOT RESIDENTIAL PLANNED DEVELOPMENT PROJECT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION ENV-02-16; GENERAL PLAN MAP AMENDMENT GPA-02-18; SPECIFIC PLAN MAP AMENDMENT SPA-01-18; ZONING MAP AMENDMENT ZOA-01-18; VESTING TENTATIVE RESIDENTIAL SUBDIVISION MAP MAP-01-16; DEVELOPMENT PLAN PERMIT DP-01-19; AND TREE REMOVAL PERMIT TRP-31-19.**

Public Hearing Open

No Public Comment

No Planning Commissioner comments on the application

Planning Commissioners and Director Feske discussed process, procedures, and CEQA.

Motion and Vote 5-0-0 to Continue to the November 10, 2020 Planning Commission Regular Meeting

**8. ACTION ITEMS**

**A. NONE**

**9. PLANNING COMMISSION REQUESTS AND UPCOMING AGENDA DEVELOPMENT**

None.

**10. ADJOURNMENT**

Chair Chippero adjourned the meeting at 7:54 p.m. to the next regular meeting of the Planning Commission on Tuesday, October 27, 2020.

**PLANNING COMMISSION  
STAFF REPORT**

**Meeting Date:** October 27, 2020

**Item Number:** 7A

**From:** Matthew Feske  
Community Development Director

**Subject:** Public Hearing to review and consider the eighteen residential-lot Planned Development Project Initial Study/Mitigated Negative Declaration ENV-01-2020; Zoning Map Amendment ZOA-02-2020; Vesting Tentative Residential Subdivision Map MAP-01-2020; Development Plan Permit DP-01-2020; and Tree Removal Permit TRP-09-2020.

**Applicant:** DeNova Homes, Inc.

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**REQUEST**

The applicant, Kerri Watt, DeNova Homes, Inc, requests approval of an Initial Study/Mitigated Negative Declaration, Zoning Map Amendment, Development Plan, Vesting Tentative Map, and Tree Removal Permit. The project is located on approximately 8.68 acres of land in Clayton. (see Attachment F for Vicinity Map).

The proposal entails review of the following entitlements:

- Environmental Review (ENV-01-20)  
Review and consideration of the Diablo Meadows Residential Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program prepared in accordance with the California Environmental Quality Act (CEQA). This report analyzes the potential impacts caused by the project and identifies various measures to mitigate these impacts.
  
- Zoning Amendment (ZOA-02-20)  
The project site is currently zoned R-15 which allows the construction of residences. The proposed project includes a request to rezone the entire site from R-15 to Planned Development (PD) in order to encompass the residential uses, open space, and bioretention basins, and amend CMC 17.78.040.D – Exemptions to PD floor area ratios.

- Development Plan (DP-01-20)  
A Development Plan to review the architecture and design of the 18 proposed single-family residences and three accessory dwelling units (ADU), as well as the project-related landscaping, drainage, fencing, and lighting.
- Vesting Tentative Map (MAP-01-20)  
A Vesting Tentative Map to subdivide the existing approximately 8.68-acre property into 18 proposed residential lots and five parcels for stormwater retention and open space uses.
- Tree Removal Permit (TRP-31-19)  
A Tree Removal Permit to allow the removal of 37 of the 58 trees on or nearby the project site to be replaced with newly planted trees, shrubs, and groundcover.

## **PROJECT INFORMATION**

Applicant/owner: DeNova Homes, Inc.  
1500 Willow Pass Court  
Concord, CA 94520  
Contact: Kerri Watt  
925.605.9403

Acreage/Location: 8.68 acres  
West of Mitchell Canyon Road and north/west of Herriman Court  
APN's: 121-090-011-2 and 121-090-016-1

General Plan Designation  
Existing and proposed: Single-Family Medium Density (MD) (3.1-5.0 units per acre)

Zoning Classification  
Existing: Single Family Residential R-15  
Proposed: Planned Development PD

Surrounding General Designations: North: Single Family Medium Density (3.1-5.0 units per acre) and Low Density (1.1 – 3.0 units per acre)  
South: Single Family Low Density (1.1 – 3.0 units per acre) and Quarry  
East: Single Family Low Density (1.1 – 3.0 units per acre)  
West: Contra Costa County Single Family Low Density (1.0-2.9 units per acre)

Surrounding Zoning Classifications: North: Planned District (PD) and Single-Family R-15 & R-12  
South: Single Family R-12

East: Single Family R-12

Environmental Review: Diablo Meadows Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-2020) prepared in accordance with the California Environmental Quality Act is discussed in further detail below.

Public Notice: On September 14, 2020, a Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration and a Notice of a Public Hearing for the Diablo Meadows Planned Development Project was published in the Contra Costa Times, posted on the notice boards, and mailed to property owners within 300 feet of the project site. The 20-day public review period for the Project's Initial Study/Mitigated Negative Declaration was from September 15, 2020 to October 5, 2020. The Public Hearing date was noticed for October 27, 2020.

Authority: Section 17.56.060 of the Zoning Ordinance requires any Planning Commission recommendations on zone changes to be made by Planning Commission resolution.

### **BACKGROUND/DISCUSSION**

The 8.68-acre project site is located on vacant land located west of Mitchell Canyon Road and north/west of Herriman Court and surrounded by existing single-family residential neighborhoods and a quarry site to the south. The applicant proposes to subdivide the existing property into 18 residential lots and 5 parcels for drainage, private roadway, and open space.

### **PLANNING COMMISSION AND CITY COUNCIL ACTIONS**

Due to the requested and proposed legislative actions for the Zoning Map Amendment and Environmental Study the City Council will be the final hearing body for this project; therefore, the Planning Commission actions will consist of recommendations to the City Council. The Planning Commission will first review and make separate recommendations to the City Council on those 2 entitlements: the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-2020) and the Rezone (ZOA-02-2020), and then would make a recommendation to the City Council for the remaining entitlements: the Development Plan (DP-01-20); the Tentative Parcel Map (MAP-01-2020); and the Tree Removal Permit (TRP-09-2020) together under one recommendation.

Separate Resolutions have been drafted for the first two entitlements (ENV-01-2020, and ZOA-02-2020, and then the remaining three entitlements (DP-01-2020, MAP-01-2020, and TRP-09-2020) are bundled together in one Resolution. In total, the Planning Commission will review and render recommendations to the City Council on three individual Resolutions.



## **ENVIRONMENTAL REVIEW**

In compliance with the California Environmental Quality Act (CEQA), the City has prepared an Initial Study/Mitigated Negative Declaration (IS/MND) and Mitigation Monitoring and Reporting Program (MMRP) for the proposed project. The IS/MND was circulated for a 20-day public review period from September 15, 2020 to October 5, 2020. Due to the length of the IS/MND, the document was distributed to the Planning Commission electronically on October 21, 2020. The IS/MND and MMRP are available for review at the Community Development Department on the third floor of City Hall and can also be found on the City's website at:

<https://ci.clayton.ca.us/community-development/planning/development-activity/current-projects-diablo-meadows/>.

The IS/MND evaluated the potential project-related environmental impacts: aesthetics, agriculture resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/circulation, tribal cultural resources, utilities and service systems, wildfire, and mandatory findings of significance. Of the twenty potential impacts evaluated, the IS/MND identified five environmental factors that are "potentially significant": biological resources, cultural resources, geology and soils, hazards and hazardous materials and noise. Mitigation measures have been provided for the five potentially significant impacts, thereby reducing the project impacts on the environment to a "less-than-significant" level. The evaluations, impacts, and mitigation measures are described in detail in the IS/MND.

## **GENERAL PLAN**

The project site is currently designated by the City of Clayton General Plan (GP) Land Use Element as Single-Family Medium Density MD (3.1 to 5 units per acre). Single-family dwellings are consistent with the MD designation. In looking at the surrounding General Plan land use designations, directly adjacent to the project site are Single-Family Low-Density LD (1.1 to 3 units per acre), Rural Estate, and Quarry.

The General Plan notes "this density is intended for and allows planned unit development (PUD) and single-family subdivisions. Development will range from a standard single-family subdivision to a zero-lot line or single-family home. Accessory structures and uses normally auxiliary to them are also allowed, as well as second dwelling units."

The proposed Planned Development project is there for compatible with the GP if the land use density is within the GP range of 3.1-5 units per acre: the project density is 3.9 Units per acre.

## **ZONING MAP AMENDMENT**

The proposed project includes a request to rezone the entire site from R-15 to Planned Development (PD) to encompass the residential uses, private open space, and bioretention basins (see Attachment G). Cluster development is not generally compatible with R-15 zoning,

yet the GP clearly depicts medium density is allowed. The proposed zoning map amendment to PD is compatible with the GP.

### **DEVELOPMENT PLAN PERMIT**

A Planned Unit Development of five (5) lots or more requires a Development Plan Permit. The development plan review process reviews the proposed site plan, architecture, arrangement and spacing of structures to provide appropriate open spaces around them, landscaping, vehicular and pedestrian access, drainage, lighting, fences, and walls.

### **TENTATIVE PARCEL MAP**

The Vesting Tentative Map shows 18 residential lots and 5 parcels for open space, private roadway, and drainage.

Section 16.12 of the CMC requires all new subdivisions to dedicate land, pay a fee in-lieu thereof, or both for park and recreational purposes. For projects involving 50 parcels or less, the proposed subdivision is required to pay a fee equal to the land value of the portion of the local park required to serve the needs of the residents of the proposed subdivision. A condition has been provided requiring payment of parkland dedication fees at the time of filing the final map.

### **Housing Element**

The Housing Element identifies the entire project site as “V-7 & V-8” vacant land. V-7, and V-8 are designated medium density single-family development in the City’s General Plan. It is assumed that units on these sites will be affordable to moderate- and above moderate-income households. The City is conditioning the developer to provide 2 low-income housing units as part of the Affordable Housing Plan for the project.

Table 47 of the Housing Element indicates these two parcels on Mitchell Canyon Road are slated for a total of 19 – 25 units for moderate or above-moderate households. The development plan with its smaller lots and homes will provide 18 single-family homes, plus 3 ADUs, thereby generating a total of 21 living units. State law requires that the State Department of Housing and Community Development (HCD) forecast statewide housing needs and allocate the anticipated need to regions throughout the state. For the Bay Area, HCD provides the regional need to the Association of Bay Area Governments (ABAG), which then distributes the Regional Housing Needs Assessment (RHNA) to the cities and counties within the ABAG region. ABAG allocates housing production goals for cities and counties based on their projected share of the region’s household growth, the state of the local housing market and vacancies, and the jurisdiction’s housing replacement needs.

“For the 2014-2022 projection period, ABAG has allocated the City of Clayton a total of 141 housing units, which must be accommodated for and demonstrated within the City’s Housing Element. The City’s 2015-2023 Housing Element identifies a citywide capacity of 275 housing units, which provides for a housing surplus of 134 units above the City’s assigned RHNA of 141 units.

State law requires that the Housing Element include an “inventory of land suitable for residential development, including vacant sites and sites having the potential for redevelopment” (Government Code Section 65583[a][3]). State law further requires that the Housing Element analyze zoning and infrastructure on these sites to ensure that housing development during the planning period is actually feasible.

**Table 47. Vacant Residential Sites**

Site #	APN/Street	Acres	Zoning	Max. Density (units/acre)	Max. Units	Realistic Unit Capacity <sup>1</sup>	Constraints
V-7	121-090-011 Mitchell Canyon Road	4.14	R-15	3.1-5	12	9	Slope (western part of property)
V-8	121-090-016 Mitchell Canyon Road	4.51	R-15	3.1-5	13	10	Slope (western part of property)
Subtotal SF		8.65			25	19	

The applicant has proposed two affordable homes on site. The Plan 1 home incorporates an attached Accessory Dwelling Unit (ADU). The primary home and ADU on Lot 18 will be reserved for rent to a moderate-income and low-income household, respectively. The other 2 ADUs located on Lots 14 & 16, also may be rented-out by the future owners under State Law. These ADUs thereby are providing additional (rental) housing to potentially under-served segments of the population and to a wider income range of the population. But, because of the design - the ADUs is attached to the existing home and appears from the front as an integral part of the home - the single-family and single-story character of the neighborhood appears uniform and harmonious within the proposed neighborhood

**Constraints Map**

Section 17.22 of the CMC requires residential density computation that does not include sensitive land areas for purposes of calculating the permitted subdivision capacity (density) on a parcel or parcels of land. Because of the constraints due to sensitive land areas, residential parcels with sensitive land areas shall fall within a not-to-exceed maximum density for developable acreage and shall not have a minimum density requirement. Removing 0.87-acres of area that are on slopes greater than 26 percent, and 2.02-acres that are a drainage area leaves 5.79 acres. The GP Single-Family Medium-Density MD (3.1 to 5.0 units per acre), for 5.8 acres computes to 18 to 29 allowable residences. (See Attachment I)

**Open Space Element**

The proposed project is requesting a rezone of the entire project site to PD; therefore, the provisions of CMC Chapter 17.28 would also be applicable, including the open space requirements of CMC Section 17.28.100. This section requires provisions for active and passive open space comprising of at least 20 percent of the project site. As a result, the proposed project

would be required to acquire and dedicate off-site land for open space or make an in-lieu contribution for the dedication of open space.

The open space topography is rolling, with an historic drainage area – Parcel B – separating the planned cluster development from a portion of the open space, requiring crossing the drainage area to access the western open space. The cluster development avoids development in this area protecting the open space and reducing potential environmental damage. The topography of the site limits the provision of active open space.

The project site is 8.68 acres, requiring the developer to provide 20 percent (1.74 acres) of that area as open space with 10 percent active open space and 10 percent passive open space. The project plan shows 4-acres open space and no active open space. Since on-site active open space is not being provided, the developer has three options and shall memorialize the selected option or a combination of options by entering into an agreement with the City: 1) acquire the equivalent amount of land for public open space and/or the construction of open space at an off-site location, 2) payment of an in-lieu financial contribution to the City for acquisition and/or maintenance of public open space, or 3) if the financial contributions are based upon maintenance costs, such contributions shall be based upon reasonable maintenance costs for a 10-year period and shall be proportional to the land area that would be required if open space area was provided on-site. The acquisition of open space or the in-lieu fee shall be paid at the time of filing the final map. Staff has provided a condition that the project shall comply with the open space requirements of the CMC.

### **Community Design Element**

The proposed project cluster development plan incorporates smaller lots to reach its development density noted in the GP and CMC, while maintaining natural open space. Cluster development *specifically* is promoted by the City's Open Space Element Policy 3b "Action Plan to Promote Open Space."

The development plan, with its cluster development, preservation of natural open space, single-story homes, rear yards, and landscaping inclusive of many native trees reflects the Community Design Element goal of retaining "the rural and historical character of Clayton's neighborhoods" and Objective 2 to "maintain landscape and natural vegetation found in Clayton as a means to provide greenery, open space, development buffer and rural atmosphere".

### **DEVELOPMENT PLAN PERMIT REVIEW**

#### **Development Standards**

The Planned Development District allows for flexibility in regulations, limitations, and restrictions different than those specified elsewhere in the City such as setbacks and height limitations, location of pedestrian and vehicular access, construction of fences and walls, amongst others. The development standards for the eighteen lots for the eighteen single-family homes and 3 ADU's are proposed in the table below. Staff analyzed the development standards in the adjacent Single Family Residential Districts and found the proposed development standards differed to those within the Single Family Residential R-15 District, which is the existing zoning district, yet

does conform to the PD districts and density of the GP. The project conforms to the topography by clustering the development in the flatter land area.

The maximum permissible density is defined by the overlying category designated in the General Plan. Strict adherence to overlying General Plan use/density boundaries may not be necessary if a reasonable mixture of uses/densities can be designed which is compatible with adjacent uses and which is not greater than the maximum permissible density as defined by the General Plan.

**R-15 Standards**

**Setback Analysis**

The Planned Development zoning proposed for the site allows the project to establish project-specific setbacks, at the discretion of the Planning Commission and City Council. Staff has provided a R-15 setback table. The proposed setbacks for the proposed homes are lower than the surrounding homes due to the proposed cluster concept visualized on the plan set.

<b>STANDARDS</b>	<b>Existing R-15 Standard</b>	<b>Proposed Planned Development</b>
Minimum Lot Area	15,000 sq. ft.	5,000 sq. ft. Lots 14, 16, & 18 7,000 sq. ft. Lots 1-13, 15, & 17 Average Lot Area 7,741 sq. ft.
Minimum Lot Width	100 ft.	50 ft. Lots 14, 16, & 18 65 ft. Average lot width
Minimum Lot Depth	100 ft.	90 ft. -100 ft.
Maximum Building Height	35 ft.	Plan 1 17 ft Plan 2 17 – 23.5 ft. Plan 3 17 – 20.5 ft. Ht. difference due to varied elevations
General Plan Density	3.1-5.0 dwelling units per acre (Medium Density)	3.9 dwelling units per acre (Medium Density)
Front Yard Bldg. Setback	20 ft.	20 ft. garage 11 ft. to 24 ft residence
Side Yard Bldg. Setback	10 ft. Minimum 25 ft. Aggregate	5 ft. Minimum 15 ft. Aggregate 9 lots 1-13, 15, & 17
Street Side Yard Setback	20 ft.	10 ft.
Rear Yard Building Setback	15 ft.	15 ft.

**Residential Floor Area Analysis**

**Building Footprint**

The purpose of the CMC 17.78.010 regulation is to implement the GP, which envisions maintaining the semi-rural character of the city and providing a variety of housing sizes. This regulation of the relationship of house size to lot size is intended to preserve and perpetuate the established relationship of buildings and spaces characteristic of Clayton's residential setting, where relatively modest residences are surrounded with generously sized areas of natural and

landscaped open grounds; assure that the scale of residential development responds to the limitations created by constrained lot sizes; and expand the range of house sizes to accommodate housing needs and preserve and enhance diversity of housing.

The following calculations show that the footprint of many of the proposed homes exceed the maximum ratio of floor area to lot size. Due to the constraints of the topography, neighbor requests of single-story homes, and GP density, the proposed plan requires an amendment to MC 17.78.040 – Exemptions to include the project with other PD projects in Clayton.

<b>CALCULATION OF FOOTPRINTS BY PLAN AREA</b>						
	living area footprint	garage	porch(es)	storage	total of non-living for footprint	total footprint
Plan 1	1927	400	52	0	452	2,379
Plan 2	1952	400	49	33	482	2,434
Plan 2X	1952	400	85	33	518	2,470
Plan 3	2117	402	61	20	483	2,600

Many of the footprints exceed that allowed by Code as shown in the following table, however the floor areas are significantly *less* than that allowed by Code. This is due to primarily one-story homes preferred by the neighbors for the proposed community be harmonious with the existing neighborhood. Bigger lots would not meet the General Plan density.

**Project Floor Area Analysis Table**

<b>CALCULATION OF BUILDING FOOTPRINT AND FLOOR AREAS</b>						
Lot*	Lot Area	Plan Type	Bldg. Footprint	Max. Footprint Allowed	Floor Area*	Max. Floor Area Allowed
1	7,376	2	2434	2,160	2589	3,840
2	7,557	3	2600	2,200	2,600	3,916
3	7,395	2	2434	2,160	2589	3,840
4	7,232	3	2600	2,160	2,600	3,840
5	7,069	2	2434	2,100	2589	3,763
6	7,007	3	2600	2,100	2,600	3,763
7	9,467	2	2434	2820	2589	4583
		2X	2470	2820	3253	4583
8	14,655	3	2600	3730	2,600	5536
9	8,544	2	2434	2520	2589	4270
		2X	2470	2520	3253	4270
10	8,567	2	2434	2520	2589	4270
		2X	2470	2520	3253	4270
11	7,642	3	2600	2280	2,600	3990

12	7,062	3	2600	2,100	2,600	3,763
13	7,382	2	2434	2,160	2589	3,840
14	5,382	1	2379	1560	2,379	2680
15	7,264	3	2600	2,160	2,600	3,840
16	5,593	1	2379	1620	2,379	2970
17	7,407	3	2600	2,200	2,600	3,916
18	6,380	1	2379	1860	2,379	3410

\* Lots 1, 3, 5 & 13 may not have a Plan 2X per agreement with neighbors.

**Architecture and Design**

The project plans show 3 floor plans with one single-family residence on the 18 residential lots. 3 of the lots have an attached ADU. The site plan, floor plans, architectural elevations, colors, and roofing are provided as Attachments I and K.

Architectural elevations submitted reflect a rural feel by using vertical, board and batten, stucco, shingle siding, cultured stone and timber materials, shutters, and colors and roofing to create a modern home. The elevations reflect farmhouse, Spanish and craftsman style architectural design. Each residence features sufficient articulation with various projections, recesses, and undulations on all four facades. The earth tones of the proposed exterior colors and materials provide dynamic yet subtle color schemes that foster a unique curb appeal. The appearance of the residences from Marshall Canyon Road is enhanced by the varied architectural elements, and minimal use of solid wall planes. The proposed single-story residence heights of up to 23.5 feet are much lower than the allowed 35 ft. height.

**Landscaping**

The applicant has submitted a Landscape Plan for the project (see Attachment L). The applicant is providing a mixture of 6 types of trees including coast live oaks and valley oaks, yew, redbud, and crape myrtle trees as well as various shrubs, ornamental grasses, and groundcovers. Staff has provided a condition that, prior to a grading permit being issued for the project, a revised Landscape, Irrigation, and Fencing Plan shall be submitted along with construction plans for building permit issuance to the Community Development Director for review and approval. Landscaping is proposed in front of the residences, in the bio-detention C-3 basins and along Mitchell Canyon Road.

Staff has provided a condition that the landscaping for the project comply with the City’s landscape water conservation standards, as listed in Chapter 17.80 of the CMC. Landscape plans show the only water thirsty landscape is a small grass area at each proposed homesite. All other landscaping is low to moderate water use.

**Fencing**

The fencing plans in the landscape plan package show a split rail fence and a privacy fence.

**Parking**

CMC requires every dwelling unit permitted in single family residential districts shall have on the same lot or parcel enough automobile storage space for at least four (4) automobiles. Each space shall have dimensions of at least ten (10) feet by twenty (20), and two (2) of the spaces must be covered. The architectural plans show garage parking for 2 cars, and the site plans show parking for a minimum of 2 additional cars in the driveway.

### **TREE REMOVAL PERMIT**

The project arborist report reevaluated 58 trees within and next to the proposed development. 36 of the trees have their trunks located on the site, 18 trees are on properties bordering the site, and 4 have trunks in between properties. 39 of the trees evaluated are protected in the City of Clayton. 37 trees are proposed for removal (660.2 inches of cumulative tree diameter) and 21 trees are proposed for preservation.

The proposed landscape plans (attachment L) propose tree planting and front yard and C-2 landscaping. Seven tree varieties are planned: oak, redbud, crepe myrtle, maidenhair, magnolia, and scholar.

### **Street Section**

The proposed plan shows a 30' curb to curb roadway (2 travel lanes and parking on one side) with a sidewalk on the north side in a 36' wide private right-of-way for the east-west portion of the subdivision street. The north-south section of the street is a 24' wide curb to curb roadway (2 travel lanes) in a 26' wide private right-of-way. The north-south section only provide access to two lots. There is a hammerhead turn-around and the end of the street.

### **GRADING**

The Vesting Tentative Map and Grading Plans show grading on the area of the cluster homes. The maximum elevation of the property is approximately 553 feet above sea level with a minimum elevation of approximately 479 feet above sea level. The elevations of the proposed grading is up to 518 above sea level at Mitchell Canyon Road while a 2:1 slope will be constructed at the westerly side of the clustered development. Plans depict a balanced site and no retaining walls. As is true of all subdivision developments, the grading elements will be reviewed for conformance with the geology report in conjunction with the review of the improvement plans.

### **East Contra Costa County Habitat Conservancy**

The project site is located within the boundaries of the ECCCHCP/NCCP, which is intended to provide an effective framework to protect natural resources in the County. The project site is located within Zone 2 of the Fee Payment Zones designated in the ECCCHCP/NCCP. Per the Fee Payment Zones, the proposed project would be subject to payment of all applicable fees prior to construction of the project.

Prior to grading the project, the initial study requires mitigation measures to minimize effects of the project, which are included in the conditions of approval. According to the Plant Survey Report (PSR), the project site consists of approximately 8.07 acres of annual grassland cover, 0.19-acres of seasonal wetlands, 0.02-acre of streams, and 0.38-acres of urban land.



## **UTILITIES**

Water, sewer, and stormwater infrastructure for the subdivision is shown on the project utility plan.

### **Water**

The project site is located entirely within the service boundary of the Contra Costa Water District (CCWD) and will provide water to the residential project site. Currently, an existing 12" CCWD water main is located in Mitchell Canyon Road adjacent to the project site. The applicant proposes to tie into this main with an 8" main in the project roadway to serve the lots. A minimum of two water laterals will be provided to each lot. CCWD recommends that the water main line in this development be looped and noted water infrastructure will need to be evaluated and any modifications will need to be designed by the Developer and approved by CCWD.

### **Sewer**

Sewer service will be provided to the proposed project by the City of Concord. The closest sewer main is in Mitchell Canyon Court approximately 110 feet west of Mitchell Canyon Road. Mitchell Canyon Court is approximately 500 feet north of the access road to the Diablo Meadows proposed development. The project would need to include construction of the approximately 110 feet of sewer main in Mitchell Canyon Court and 500' of sewer main in Mitchell Canyon Road. The elevation of the existing sewer at the connection point in Mitchell Canyon Court is 482.43 which should allow adequate fall to provide gravity sewer service to the new development. The sewer improvements will also include sewer laterals to the proposed residential lots.

### **Stormwater**

To comply with State's C.3 Standards, the portion of the project site proposed for development has been separated into drainage management areas. Stormwater runoff from the drainage management areas would be directed to separate bioretention areas. Per C.3 Guidebook instructions, the proposed bioretention areas would be sized with adequate capacity to receive and treat all runoff from the impervious areas of the project. Runoff entering the bioretention areas would move through permeable soil layers, which would slow the stormwater while also removing pollutants that may be contained in the runoff. Stormwater that exceeds the bioretention facilities' infiltration capacity, such as in the case of heavy storm events, would be directed to existing drainage area located in the western portion of the project site or into the existing storm drain main on Mitchell Canyon Road.

Funding for the operation and maintenance of the stormwater detention basins will be provided by the HOA/CFD.

Conditions have been provided addressing project-related stormwater, storm drain, and drainage issues, including the applicant submitting to the City Engineer for review and approval a stormwater operations and maintenance plan along with a final stormwater control plan.

## **AGENCY COMMENTS**

The project conditions of approval list agency comments from Contra Costa County Flood Control District, Contra Costa County Fire Protection District, Contra Costa Water District,

### **RECOMMENDATION**

Staff recommends that the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive, and consider any public testimony, and if determined to be appropriate:

- 1) Approve Planning Commission Resolution No. \_\_\_\_\_ (Attachment B) recommending the City Council adopt the Diablo Meadows Residential Subdivision Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-20); and
- 2) Approve Planning Commission Resolution No. \_\_\_\_\_ (Attachment C) recommending City Council approval of Ordinance No. \_\_\_\_\_ (Attachment D) for a rezone of the project site from R-15 to Planned Development District (PD) and Text modification to CMC 17.78.040 - Exemptions (PD Lot Coverage areas) for the Diablo Meadows Residential Subdivision Planned Development Project (ZOA-02-20); and
- 3) Approve Planning Commission Resolution No. \_\_\_\_\_ (Attachment E) recommending City Council approval of the Diablo Meadows Residential Subdivision Planned Development Project Development Plan (DP-01-20), Tentative Subdivision Map (MAP-01-20), Development Review Permit (DP-1-20), and Tree Removal Permit (TRP-9-20) for an eighteen-lot residential subdivision.

### **Alternative Recommendation**

Request staff draft a resolution recommending that the City Council deny the Rezone, Vesting Tentative Map, Development Plan Review Permit, and Tree Removal Permit.

### **FISCAL IMPACT**

There are no immediate fiscal impacts associated with the application. Should the proposed project be approved, there would be an increase in property taxes, which would be a direct positive fiscal impact. In addition, after construction and occupancy of the homes, the residents could have an indirect positive fiscal impact by shopping and dining at the local businesses and increasing sales taxes.

### **ATTACHMENTS**

- A. Conditions of Approval
- B. Planning Commission Resolution No. -20 IS/MND
- C. Planning Commission Resolution No. -20 Zoning Map & Text Amendment
- D. Clayton Ordinance XXX Zoning Map Amendment
- E. Planning Commission Resolution No. -20 Vesting Tentative Map, Development Plan, Tree Removal
- F. Vicinity and Site Map

- G. Zoning Map Amendment Exhibit
  - H. MC 17.78.040 – Exemptions Text Exhibit
  - I. Vesting Tentative Map, Boundary and Existing Conditions, Preliminary Grading and Drainage, Preliminary Utility Plan, Preliminary Development/ Constraints Plan, Stormwater Control Plan
  - J. Design Review Booklet: Architectural Plans (Floor Plans and Architectural Elevations
  - K. Architectural Color Schemes
  - L. Landscape and Fencing Plan
  - M. Arborist Report
  - N. Existing Tree Exhibit
  - O. Grading Cross Sections
  - P. Earthwork Calcs Exhibit
- Initial Study/ Mitigated Negative Declaration stand alone document due to size

## DIABLO MEADOWS CONDITIONS OF APPROVAL

### FILES

Environmental Review ENV-01-20; Zoning Map Amendment ZOA-02-20; Vesting Tentative Subdivision Map MAP-01-20; Development Plan Permit DP-01-20; and Tree Removal Permit TRP-09-20.

DeNova Homes, Inc. (Applicant and Owner)

### Section A Approvals

A1. \_\_\_\_\_ This approval is based on the following exhibits/reports received by the Community Development Department for 18 residential lots and 5 parcels on the approximately 8.6-acre site as follows:

- Raney *Diablo Meadows Project Initial Study/Mitigated Negative Declaration*
- City of Clayton. *Clayton 2020 General Plan*. As amended July 19, 2016.
- City of Clayton. City of Clayton Municipal Code. Available at: [https://library.municode.com/ca/clayton/codes/municipal\\_code?nodeId=CICOCLCA](https://library.municode.com/ca/clayton/codes/municipal_code?nodeId=CICOCLCA)
- Contra Costa County. General Plan
- Trees, Bugs, Dirt Landscape Consulting and Training. Arborist Report: Diablo Canyon, Mitchell Canyon Road, Clayton, CA. April 30th, 2020.
- Vesting Tentative Map, Boundary and Existing Conditions, Preliminary Grading and Drainage, Preliminary Utility Plan, Preliminary Development/ Constraints Plan, Stormwater Control Plan, Existing Tree Exhibit, Grading Cross Sections, and Earthwork Calcs Exhibit, prepared by Meridian Associates, inc. dated March 2020
- Design Review Booklet: Architectural Plans (Floor Plans and Architectural Elevations, and Architectural Color Schemes, prepared by OAG Architects, Inc., dated 4/22/20
- Landscape and Fencing Plan, prepared by Borrecco/Kilian & Associates, Inc., dated 4/8/20
- Preliminary title report, prepared by First American Title, dated 3/20/20

A2. \_\_\_\_\_ Approval of the vesting tentative map shall not be construed as a guarantee of approvals of specific proposed improvements shown.

A3. \_\_\_\_\_ The development shall comply with the City of Clayton Municipal Code, policies, and standards unless a specific exception is granted thereto, or is otherwise modified in these conditions or in the development agreement.

A4. \_\_\_\_\_ Prior to the issuance of building permits, the architecture, sound walls, fencing, mailboxes, lighting, any accent paving, addressing, and landscaping for the entire project shall be subject to review and approval by the Planning Commission.

A5. \_\_\_\_\_ A final and unchallenged approval of this project supersedes previous approvals, if any, that have been granted for this site.

- A6. \_\_\_\_\_ Permits or approvals, whether discretionary or ministerial, will not be considered if the applicant is not current on fees, reimbursement and/or other payments that are due the City.
- A7. \_\_\_\_\_ All required easements or rights-of-way for improvements shall be obtained by the applicant at no cost to the City of Clayton. Advance permission shall be obtained from any property owner or, if required, from easement holders, for any work done within such property or easements.
- A8. \_\_\_\_\_ All easements of record that are no longer required and affect individual lots or parcels within this project shall be removed prior to or concurrently with the recordation of the final map or subsequent separate document as approved by City Engineer.
- A9. \_\_\_\_\_ All advertising signs shall be consistent with the Sign Ordinance or as approved by the Community Development Director.
- A10. \_\_\_\_\_ The approval is for a two-year period, which may be extended for an additional one year. Extension requests must be submitted prior to expiration of the initial approval and must be accompanied by the appropriate filing fee. An extension request is subject to review and approval of the Community Development Director.
- A11. \_\_\_\_\_ Pursuant to Government Code Section 66474.9, the applicant (including the subdivider or any agent thereof) shall defend, indemnify, and hold harmless the City of Clayton and its agents, officers, consultants, and employees from any claim, action, or proceeding against the City or its agents, officers, consultants, or employees to attack, set aside, void, or annul the City's approval concerning this subdivision map application, which action is brought within the time period provided for in Section 66499.37. The City will promptly notify the subdivider of any such claim, action, or proceeding and cooperate fully in the defense.
- A12. \_\_\_\_\_ The applicant agrees to indemnify, protect, defend, and hold harmless the City and its elected and appointed officials, officers, employees, consultants, and agents from and against any and all liabilities, claims, actions, causes, proceedings, suits, damages, judgements, liens, levies, costs, and expenses of whatever nature, including attorney's fees and disbursements arising out of or in any way relating to the issuance of this entitlement, any actions taken by the City relating to this entitlement, or the environmental review conducted under the California Environmental Quality Act for this entitlement and related actions.
- A13. \_\_\_\_\_ The project is subject to development impact fees and parkland dedication fees, as established in the Municipal Code at the time of payment.
- A14. \_\_\_\_\_ All mitigation measures set forth in the Diablo Meadows Subdivision Initial Study/Negative Declaration (ENV 01-20) are hereby incorporated into these Conditions of

Approval, as if fully contained herein, except those found infeasible pursuant to Section 15091 of the California Environmental Quality Act Guidelines.

A15. \_\_\_\_\_ The Developer shall be responsible for all fees and environmental review costs, including those charged by other governmental agencies including, but not limited to, the California Department of Fish and Wildlife (CDFW) and the U.S. Army Corps of Engineers (USACE).

A16. \_\_\_\_\_ This application is subject to an initial application fee, which was paid with the application submittal, plus time and material costs if the application review expenses exceed 100% of the initial fee. Any additional fee due must be paid within 60 days of the permit effective date or prior to use of the permit, whichever occurs first. The applicant may obtain current costs by contacting the Community Development Director. If the applicant owes additional fees, a bill will be sent shortly after permit issuance.

### **Section B Rezoning/Amending**

B1. \_\_\_\_\_ This vesting tentative map approval is not effective until the Zoning Map designation for the project site has been rezoned From R-15 to Planned Development District (PD) [ZOA 02-20], and the text has been amended to include Diablo Meadows in CMC 17.78.040.D – Exemptions to PD floor are area ratios.

### **Section C Residential Lots**

C1. \_\_\_\_\_ The maximum number of units approved is eighteen (18) single-family residential lots as shown on the vesting tentative map, development package, and associated plan submittals noted above.

### **Section D Development Plan/Design Review**

D1. \_\_\_\_\_ 60 days prior to the approval of the grading plan, the applicant shall submit for review and approval by the Community Development Director a revised development plan set that depicts the modifications requested herein.

### **Section E Modifications**

E1. \_\_\_\_\_ Any revisions to the internal circulation plan or lot layout shall be subject for review and approval of the Community Development Director and City Engineer at least 60 days prior to filing the Final Map or obtaining a Grading Permit.

E2. \_\_\_\_\_ The final map shall show an offer of dedication for a public utility easement over private Lane as approved by the City Engineer.

E3. \_\_\_\_\_ Provide all-weather access to the stormwater detention basins.

- E4. \_\_\_\_\_ Lot 13 shall provide a plan 2 home (not a 3 or 2X home) as noted on the plans home.
- E5. \_\_\_\_\_ Lot fencing shall consist of 6' wood good neighbor fences. No "double fencing" will be allowed along shared property lines.
- E6. \_\_\_\_\_ The applicant shall provide all residential units constructed within 100' of Mitchell Canyon Road with outdoor areas that are exposed to noise levels from Mitchell Canyon Road at levels no greater than 60 dB. This may require sound walls along Mitchell Canyon Road.
- E7. \_\_\_\_\_ The grading and landscape plans shall be modified to reflect the trees to remain.
- E8. \_\_\_\_\_ A Homeowners Association (HOA) shall be formed for the maintenance of the project as shown on the tentative subdivision map and development plans and noted below in the covenants, conditions and restrictions (CC&Rs).

#### **Section F Covenants, Conditions and Restrictions**

- F1. \_\_\_\_\_ The CC&Rs for the single-family residential lots shall be submitted for the review and approval of the Zoning Administrator at least 60 days prior to filing the Final Map. This document shall provide for establishment, ownership, and maintenance of common space (including the area between Mitchell Canyon Road and the property line), parking, fire protection, tree protection, fencing, private lane, drainage maintenance, keeping of pets, and establishment of signs, and it will include conditions as noted:
- a. Setbacks for the home shall be as noted and shown on the approved project development plan. Deviations from that plan must be approved by the Community Development Director.
  - b. The building heights shall not exceed twenty-five (25) feet.
  - c. Fencing is per the Project Fencing Plan as modified to show a rural mesh fence for the Open Space Fencing. Property owners are responsible for the repair and maintenance of the fences along their respective property lines. The fences shall be maintained in a style consistent with the design approved by the City unless prior written approval is obtained from the Community Development Director.
  - d. All fencing located along the Mitchell Canyon Road frontage portion of lots 1 and 18 shall be privacy fencing from the residences gate to rear yard, and rail fence to private drive.
  - e. All fencing shall be 6' tall privacy fencing or sound walls as noted in Conditions E5 and E6 excepting lots 1 & 18 as noted in Condition F1d and rural mesh fencing for Open Space as noted in Condition F1c.
  - f. Property owners shall maintain any gates on their property needed for access to aboveground or underground drainage facilities.

- g. Gates to the private open space shall be included as required by the Contra Costa County Fire Protection District (CCCFPD) and must accommodate fire apparatus.
  - h. The HOA shall maintain the existing open space fencing.
  - i. The HOA shall cut down and remove all weeds, grass, vines, or other growth that is capable of being ignited and endangering property. (304.1.2) California Fire Code (CFC).
  - j. No provision in the CC&Rs that is included as a result of these Conditions of Approval may be amended without the prior written approval of the City of Clayton.
- F2. \_\_\_\_\_ The CC&Rs document shall reference the approved drainage improvement maintenance plan and the fencing plan program.
- F3. \_\_\_\_\_ The CC&Rs shall clearly note that all subdivision maintenance is to be done by the property owner, the homeowners association, or the community facilities district.
- F4. \_\_\_\_\_ The CC&Rs shall make an adequate provision for funding road maintenance and establishing a maintenance cycle standard.
- F5. \_\_\_\_\_ The CC&Rs shall make an adequate provision for funding the maintenance of the C.3 storm drainage facilities and establishing a maintenance cycle standard.
- F6. \_\_\_\_\_ In accordance with the County Child Care Ordinance, the CC&Rs shall indicate that a childcare facility may be located at any residential unit or lot, consistent with the existing laws.
- F7. \_\_\_\_\_ The Developer shall provide homeowners with educational materials regarding proper storage and disposal of household hazardous wastes, including fuels, oils, paints, and solvents. The format and wording of the educational materials shall be approved in advance by the Community Development Director.

## **Section G CC&R Deed Restrictions**

- G1. \_\_\_\_\_ The Covenants, Conditions and Restrictions (CC&Rs developed for this project shall include the following deed restrictions. The wording of the following deed disclosures shall be approved by the Clayton Community Development Director and City Attorney. The following deeds are to be recorded concurrently with the final map, and a note on the final map shall be utilized:
- a. The final map shall show private open space deed restrictions in Parcels A-E. The restrictions are intended to preserve the open and attractive visual character of the subject area. The restrictions shall prohibit grading (except for remedial grading, drainage improvements, and disking for weed abatement); construction of all buildings and structures; and storage of any motor vehicles, trailers, recreational vehicles, graders, tractors, or similar equipment.



- b. Concurrent with recordation of the Final Map, the following statement shall be recorded at the County Recorder's Office for each parcel within the subdivision to notify owners of the lots that they own property adjacent to a quarry and rural areas:
- "This document shall serve as notification that you have purchased land near a quarry where you may regularly find equipment using local roads; equipment causing dust; spraying occurring regularly, and noise associated with quarry operations and /or farming, and you should be fully aware of this at the time of purchase."
- c. No alterations of Storm Drain Management on parcels A-E shall be allowed, except for activities approved as part of a maintenance, preservation, and/or enhancement plan. The deed restriction shall prohibit, in perpetuity, use and improvements within the Storm Drain Management areas. Specifically, the deed restriction shall prohibit any physical alterations within the Storm Drain Management parcels, including vegetation removal, vegetation planting, landform alterations, or construction of structures or improvements. The deed restriction shall be recorded concurrently with the final map.
- d. A deed restriction shall alert each property owner to the possible presence of buried human remains and/or artifacts. The deed restriction shall require that if any of these cultural remains are discovered during-ground disturbing activities, work shall be halted within 50 feet of the discovery until a qualified archaeologist is retained to inspect the discovery. If the archaeologist determines that the find is important, no additional construction shall take place until the find can be fully evaluated according to procedures outlined in Section 106 of the Historic Preservation Act. If human remains are uncovered, the Contra Costa County Coroner shall be notified immediately. If the remains are determined to be Native American, a qualified Native American representative shall be contacted, and the Native American Heritage Commission (NAHC) shall be notified within 24 hours. The most likely descendants (MLD) of the deceased shall be given the chance to make recommendations for the remains. If no recommendations are made within 24 hours, remains may be reinterred elsewhere. If recommendations are made and not accepted, the NAHC shall mediate the problem.
- e. Applicant shall record a statement to run with deeds to property stating that no trees are to be removed on the property, excepting those approved to be removed on the project's tree preservation plan, without obtaining a tree permit from the Community Development Department.
- f. Applicant shall record a statement to run with deeds to property acknowledging the approved geotechnical report by title, author (firm), and date, calling attention to approved recommendations, and noting that the report is available from the seller.
- g. Prepare a deed disclosure to be recorded with each lot that they are in a Community Facilities District (CFD). Should the HOA become defunct for any reason, the CFD will require annual assessment installments, hereinafter collectively referred to as special liens. If special liens described above are not paid, foreclosure proceedings may be initiated at any time. After property taxes become delinquent, property may be sold for the delinquent amounts earlier than with regular property taxes.

G2. \_\_\_\_\_ The deeds for all lots shall contain language that prohibits any future land division(s) to create additional home sites.

### **Section H Community Facilities District**

H1. \_\_\_\_\_ If not already a part of the City's existing landscape maintenance district, the Developer shall annex into the district prior to the issuance of the first certificate of occupancy or sale of any lot, whichever comes first. The annexation request shall include annual rate adjustments to account for cost-of-living increases.

H2. \_\_\_\_\_ The maintenance of all public and private landscaping and stormwater facilities on or adjacent to the development from the edge of the roadway surface on Mitchell Canyon Road is the responsibility of the homeowner and/or HOA. The developer shall form a CFD that will levy the assessments should the HOA fail to fulfill its requirements. Prior to approval of the final map, the Developer shall submit a written request for and consent to the formation of a CFD (consistent with the Mello-Roos Community Facilities Act of 1982). Prior to issuance of a certificate of occupancy for the first residence (including model homes) or the sale of any lot, whichever comes first, the Developer shall participate in the formation, including the holding of a ballot election and the levying of assessments, of the CFD. The CFD shall include the land area of the entire project. The CFD shall include annual rate adjustments to account for cost-of-living increases. (Note: This CFD is separate from the existing City-wide landscape district.) Assessments shall be levied to fund the cost of all operating, maintenance, and repair needs for all of the storm drainage facilities and basin improvements; periodic inspections and testing; roadway maintenance; operating, maintenance, and repair needs for the irrigation and landscaping; periodic inspections costs; City administrative and reporting costs; County levy and collection costs; City overhead charges; and reserve funds for capital replacements and major repairs.

H3. \_\_\_\_\_ The Developer shall pay a fair share contribution, as determined by the City Engineer, to the City for impacts to city services (e.g., police, library, administration, planning, maintenance, and engineering) directly related to impacts of the proposed project, including impact fees and the establishment of the CFD. The payment shall be made at the time of issuance of the building permit for the project's first unit and shall be based on the findings of the fiscal impact study prepared for the CFD.

### **Section I Tree Retention and Landscaping**

I1. \_\_\_\_\_ Prior to occupancy of the first residence, the Developer shall install the landscaping and irrigation generally shown on the landscape plans, subject to City review and approval.

I2. \_\_\_\_\_ A note shall be added to the grading plan that references the April 30, 2020 project's Arborist Report. All trees to be saved and removed shall be marked on the grading

plan. The Community Development Department shall review and approve grading, landscape, and improvement plans to ensure adequate measures are taken to protect trees.

13. \_\_\_\_\_ Mitigation Measure 10. The following tree protection measures shall be implemented pursuant to the recommendations listed in the Arborist Report, to the extent feasible:

- The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to identify the location of the existing trees to be retained, as identified in the Arborist Report;
- A five-foot tree protection zone shall be established from the northern and southern fence lines extending into the development area where no foot, vehicle, storage, or any other intrusion shall be allowed during all construction phases. Prior to installation of new landscaping and fencing along property lines, protected trees on property lines shall not be disturbed within the tree protection zone;
- Landscaping around the protected oak (Tree #37) on-site shall be limited to mowing weeds, installing a layer of cardboard, and maintaining two inches of wood chip mulch on the soil surface;
- Fences along the northern and southern borders shall require absolutely no grading or digging within five radial feet of all protected tree trunks;
- New trees shall be selected, installed, and maintained as per requirements of the City of Clayton; and
- If a new fence line is established for the property, rather than demolishing and reinstalling the existing fence line, four border trees shall be preserved.

14. \_\_\_\_\_ Mitigation Measure 11. Prior to the initiation of ground-disturbing activities, the potential for root damage shall be minimized through compliance with the following recommendations listed in the arborist report:

- Air spading shall be performed along property lines within the northern and southern portions of the project site;
- All exposed roots shall be pruned using sharp sawzall blades;
- Pruned roots shall be covered with soil.

15. \_\_\_\_\_ Mitigation Measure 12. Prior to the initiation of ground-disturbing activities, the potential for crown damage shall be minimized through compliance with the following recommendations listed in the arborist report:

- Crowns shall be raised as specified to allow for vehicle and equipment clearance;
- Crowns shall be raised 16 feet above the existing grade;
- 50 percent of live crown ratio shall be maintained;
- Thinning cuts shall be made two inches in diameter or smaller;
- Downward growing branches from zero to 15 feet above grade shall be removed;
- Branches larger than two inches in diameter shall be shortened by heading the branches back to at least half of their diameters; and

- No more than 25 percent of a crown is to be removed in one season
16. \_\_\_\_\_ Mitigation Measure 13. A tree replacement plan for the removal of 152 inches of cumulative trunk diameter of protected tree species shall be prepared in accordance with Municipal Code Section 15.070.040 A1.or A.2., or, subject to determination by the Community Development Director or Planning Commission, the applicant must pay an in-lieu fee to the City for the purchase and installation of trees of equivalent value.
  17. \_\_\_\_\_ Three sets of the final landscape and irrigation plans shall be submitted with the grading and improvement plans for review and approval by the Community Development Department, Engineering Department, and the Maintenance Department. These plans shall be approved prior to issuance of grading or encroachment permits. The landscape and irrigation plans shall be prepared by a landscape architect; have overall dimensions of 24 inches by 36 inches; contain approval blocks for the Community Development Director, City Engineer, and Maintenance Department; and show all existing and proposed public utilities within the project limits.
  18. \_\_\_\_\_ Landscaping is to be maintained by the individual property owner(s) and/or the HOA and/or CFD and shall be installed in conformance with the approved plans prior to occupancy of the individual residence(s).
  19. \_\_\_\_\_ Landscaping is subject to inspection by the Maintenance Department and must be guaranteed for one year from the date of acceptance of the subdivision improvements by the City Council.
  110. \_\_\_\_\_ Installation of all irrigation and landscaping shall be performed by a licensed contractor. Open trench inspection of the irrigation installation in City right-of-way is subject to approval of the City Maintenance Department. Prior to the final inspection by the Maintenance Department, the installation shall be approved by the landscape architect.
  111. \_\_\_\_\_ All trees shall be planted at least 10 feet away from any public water, sewer, or storm drain lines, unless a closer location is approved by the City. All trees shall be installed with support staking. All nursery stakes must be removed from trees. All trees planted within 8 feet of a sidewalk, trail, or driveway shall be installed with root guards.
  112. \_\_\_\_\_ Prior to release of the Developer's maintenance responsibilities, all landscaped areas shall be inspected by representatives of the City Engineer and Maintenance Departments. This inspection shall include a water audit of the landscaped areas to identify any irrigation problems. The water audit shall be performed by City staff or contracted for by City staff and paid for by the Developer, at the City's sole discretion. All corrective measures shall be made as called for in the water audit and the punch list prepared by City staff and as-built plans (on reproducible Mylar or in a format approved by the City Engineer) shall be submitted to the City Engineer prior to the release of the Developer's responsibilities.

- I13. \_\_\_\_\_ The Developer shall maintain all landscaping and other facilities that will become the responsibility of the HOA for one year after the HOA has been formed and a plan for the smooth transition of responsibility has been prepared by the developer and approved by the City Engineer. Prior to release of the Developer's maintenance responsibilities, all landscaped areas shall be inspected by representatives of the City Engineer and Maintenance Departments. This inspection shall include a water audit of the landscaped areas to identify any irrigation problems. The water audit shall be performed by City staff or contracted for by City staff and paid for by the Developer, at the City's sole discretion. All corrective measures shall be made as called for in the water audit and the punch list prepared by City staff and as-built plans (on reproducible Mylar or in a format approved by the City Engineer) shall be submitted to the City Engineer prior to the release of the Developer's responsibilities.
- I14. \_\_\_\_\_ Landscaping shall be installed in conformance with the approved plans prior to final inspection.
- I15. \_\_\_\_\_ Plans shall conform with the Water Conserving Landscape Guidelines in Chapter 17.80 of the Zoning Ordinance and applicable stormwater regulations.

#### **Section J Fencing Conditions**

- J1. \_\_\_\_\_ The fencing plan shown on the Landscape Plan shall be amended to show the items listed below and submitted for review and approval by the Community Development Department.
- a. The 6' tall solid wood "good-neighbor" fence proposed along the rear property lines of Lots 1 – 6 shall parallel and not replace the adjacent neighbor's existing cyclone fencing unless otherwise desired by the neighbor (895 Midhill Road). This fence also shall be extended across Parcel E (bio-retention basin). The height or design of the fence along this property line of Parcel E may be modified to accommodate safe sight distance for exiting the driveway of 895 Midhill Road if so desired by the neighbor or directed by the City.
  - b. The 6' tall solid wood "good neighbor" fence proposed along the rear property lines of Lots 12, 13 & 14 shall replace the existing fencing of the home at 33 Herriman Court and shall be located along the shared property-line.
- J2. \_\_\_\_\_ All fences or walls in proximity to Mitchell Canyon Road public right-of-way shall be located at least 1 foot inside the respective parcel.
- J3. \_\_\_\_\_ The developer shall repair all existing open space fencing, as needed, at the completion of grading operations to the satisfaction of the City Engineer.

#### **Section K Grading**

K1. \_\_\_\_\_ Mitigation Measure 1. The project applicant shall be subject to pay all required fees associated with development in Zone 2 of the ECCCHCP/NCCP prior to the start of construction at the current fee rate in place at that time.

K2. \_\_\_\_\_ Mitigation Measure 2. Preconstruction Survey. Prior to any ground disturbance related to covered activities, a USFWS/CDFW-approved biologist shall conduct a preconstruction survey in areas identified in the planning surveys as supporting suitable breeding or denning habitat for San Joaquin kit fox. The surveys shall establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines (U.S Fish and Wildlife Service, 1999).

The preconstruction survey shall be conducted within 30 days of ground disturbance. On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership will not be surveyed. The status of all dens shall be determined and mapped. Written results of the preconstruction survey shall be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance. Concurrence is not required prior to initiation of covered activities.

Avoidance and Minimization Measures. If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the project applicant shall comply with the following avoidance and minimization requirements:

- If a San Joaquin kit fox den is discovered within the proposed development footprint, the den shall be monitored for three days by a USFWS-CDFW-approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.
- Unoccupied dens should be destroyed immediately to prevent subsequent use.
- If a natal or pupping den is found, USFWS and CDFW shall be notified immediately. The den shall not be destroyed until the pups and adults have vacated and further consultation with USFWS and the CDFW has been performed.
- If kit fox activity is observed at the den during the initial monitoring period, the den shall be monitored for an additional five consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied, the den may be excavated under the direction of the biologist. Alternatively, if the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgement of a biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities).
- If San Joaquin kit fox dens are identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances shall be demarcated. The configuration of exclusion zones shall be circular,

with a radius measured outward from the den entrance(s). No covered activities shall occur within the exclusion zones. Exclusion zone radii for potential dens shall be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by the kit fox.

- K3. \_\_\_\_\_ Mitigation Measure 3. Preconstruction Survey. Prior to any ground disturbance related to covered activities, a USFWS/CDFW-approved biologist shall conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The survey shall establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995).

On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership shall not be surveyed. Surveys shall take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. Surveys shall take place no more than 30 days prior to construction. During the breeding season (February 1 to August 31), surveys shall document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1 to January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results shall be valid only for the season (breeding or nonbreeding) during which the survey is conducted.

Avoidance and Minimization Measures. If burrowing owls are found during the breeding season (February 1 to August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance shall include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 to January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a buffer zone (described below).

During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur shall be established around each occupied burrow (nest site). Buffer zones of 160 feet shall be established around each burrow being used during the nonbreeding season. The buffers shall be delineated by highly visible, temporary construction fencing.

If occupied burrows for burrowing owls are not avoided, passive relocation shall be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored

daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

- K4. \_\_\_\_\_ Mitigation Measure 4. Prior to implementation of covered activities, a qualified biologist shall conduct a preconstruction survey to establish whether nests of golden eagles are occupied. If nests are occupied, minimization requirements and construction monitoring shall be required.

Covered activities shall be prohibited within 0.5-mile of active nests. Nests can be built and active at almost any time of the year, although mating and egg incubation occurs late January through August, with peak activity in March through July. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the Implementing Entity shall coordinate with CDFW/USFWS to determine the appropriate buffer size.

Construction monitoring shall focus on ensuring that no covered activities occur within the buffer zone established around an active nest. Although no known golden eagle nest sites occur within or near the Urban Limit Line, covered activities inside and outside of the Preserve System have the potential to disturb golden eagle nest sites. Construction monitoring shall ensure that direct effects to golden eagles are minimized.

- K5. \_\_\_\_\_ Mitigation Measure 5. Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15-August 31), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether white-tailed kite is nesting in trees in or visible from the site. The findings of the survey shall be submitted to the Community Development Department. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.

- K6. \_\_\_\_\_ Mitigation Measure 6. If work is scheduled to take place between February 1 and August 31, a pre-construction nesting bird survey shall be conducted by a qualified biologist within 14 days of construction. The findings of the survey shall be submitted to the Community Development Department. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.

- K7. \_\_\_\_\_ Mitigation Measure 7. The proposed project shall be designed in compliance with stream setback requirements set forth in Conservation Measures 1.7 and 2.12 of the ECCCHCP/NCCP, including the following avoidance and minimization measures:

- All wetlands to be avoided by covered activities shall be temporarily staked in the field by a qualified biologist, and a 25-foot buffer zone shall be implemented along the seasonal wetland swale and between the ephemeral streams and development activities.



- Herbicides shall not be applied within the buffer area around ephemeral streams or the seasonal wetland swale unless needed to control serious invasive plants. In such a case, herbicides that have been approved by the EPA for use in or adjacent to aquatic habitats may be used as long as label instructions are followed and applications avoid or minimize impacts on covered species and their habitats. Appropriate herbicides shall be applied to the ruderal grassland within the buffer area during the dry season to control non-native invasive species such as yellow star-thistle. Herbicide drift shall be minimized by applying the herbicide as close to the target area as possible.
- Personnel conducting ground-disturbing activities within or adjacent to the buffer zone of the ephemeral streams or the seasonal wetland swale shall be trained by a qualified biologist in the avoidance and minimization measures set forth by this IS/MND and the permit obligations of the project proponents working under the ECCCHCP.

K8. \_\_\_\_\_ Mitigation Measure 8. Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. No construction or maintenance vehicles shall be refueled within 200 feet of ephemeral streams or the seasonal wetland swale unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill. In addition, trash generated during project construction shall be promptly removed from the site.

K9. \_\_\_\_\_ Mitigation Measure 9. The proposed project shall be implemented in compliance with the hydrologic maintenance and erosion minimization measures set forth in Conservation Measures 1.10 and 2.12 of the ECCCHCP/NCCP. Standard construction best management practices (BMPs) shall be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs shall include the use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences, or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydromulch.

Appropriate erosion-control measures (e.g. fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into the ephemeral streams or the seasonal wetland swale. Filter fences and mesh shall be of material that shall not entrap reptiles or amphibians. Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians. Fiber rolls used for erosion control shall be certified as free of noxious weed seed. Seed mixtures applied for erosion control shall not contain invasive non-native species and shall be composed of native species or sterile non-native species.

K10. \_\_\_\_\_ Mitigation Measure 14. Prior to the issuance of a grading permit, the grading plan shall include a requirement (via notation) indicating that if cultural resources, or human remains are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City, at the expense of the project applicant, shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the

City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken.

K11. \_\_\_\_\_ Mitigation Measure 15. Pursuant to State Health and Safety Code §7050.5(c) and State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop within 100 feet of the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the Most Likely Descendant (MLD). The MLD shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work shall not take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist at the applicant's expense, until the preceding actions have been implemented.

K12. \_\_\_\_\_ Mitigation Measure 16. Prior to approval of the improvement plans for the project, all recommendations from the Geotechnical Report prepared for the project by Stevens, Ferrone, & Bailey Engineering Company, Inc (2020) shall be incorporated into the improvement plans to the satisfaction of the City Engineer. In addition, the applicant shall retain a California Registered Geotechnical Engineer to perform field observations during grading. Compliance with the recommendations of the Geotechnical Engineer shall be provided to the City Engineer.

K13. \_\_\_\_\_ Mitigation Measure 17. Prior to the issuance of a grading permit, the project applicant shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:

- Hydro-seeding;
- Placement of erosion control measures within drainage ways and ahead of drop inlets;
- The temporary lining (during construction activities) of drop inlets with "filter fabric";
- The placement of straw wattles along slope contours;
- Use of a designated equipment and vehicle "wash-out" location;
- Use of siltation fences;
- Use of on-site rock/gravel road at construction access points; and
- Use of sediment basins and dust palliatives.

K14. \_\_\_\_\_ Mitigation Measure 18. Prior to initiation of any ground disturbance activities, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from Contra Costa Health Services and properly abandon the on-site well to the satisfaction of the Contra Costa Health Services Department. Proof of abandonment shall be provided to the City of Clayton Community Development Department and City Engineer.

K15. \_\_\_\_\_ Mitigation Measure 19. During grading and construction, the project contractor shall ensure that the following measures are implemented:

- Grading and construction activities shall be limited to the daytime hours between 7:00 AM to 5:00 PM Monday through Friday, as specified in Section 15.01.101 of the Clayton Municipal Code. Any such work beyond said hours and days is strictly prohibited unless previously specifically authorized in writing by the City Engineer or designee or by project conditions of approval;
- The distances between on-site construction and demolition staging areas and the nearest surrounding residences shall be maximized to the extent possible; and
- All construction and demolition equipment that utilizes internal combustion engines shall be fitted with manufacturer's mufflers or equivalent.

K16. \_\_\_\_\_ The Grading Plan shall be amended as follows:

- a. A licensed surveyor or engineer shall survey the locations and limits of the trunk and dripline of all trees to be retained that could be affected by any work during project construction. The locations and limits shall be shown on the grading plans and appropriate construction and plot plans.
- b. All disturbed slopes steeper than 10% shall be track-walked for surface compaction, covered with jute netting and hydroseeded, or stabilized with other techniques acceptable to the City Engineer.
- c. All new graded slopes must be configured to undulate and avoid relatively flat planes or sharp transitions to un-graded areas.
- d. All required side setbacks shall contain at least 5 feet of flat, unoccupied area. "Flat" means a cross-slope between 2% and 10%. "Unoccupied" means no encroachments by fireplaces, building pop outs (with or without a foundation), air conditioning pads, and the like.
- e. Two feet of flat area shall be provided on the graded portions of properties between a property or right-of-way line and the top of slope.
- f. Any retaining walls in the project shall be constructed of segmental units (a.k.a., keystone), masonry block, or concrete. All retaining walls visible from street or sidewalk areas shall be covered with a stone fascia. Retaining walls greater than 3 feet in height shall be designed by a licensed engineer.
- g. Signature blocks shall be provided for the Community Development Director and the City Engineer.

K17. \_\_\_\_\_ The Developer shall identify the BMPs for protection of air quality to minimize the generation of dust during construction. The Bay Area Air Quality Management District's Basic Construction Measures shall be included within the project grading plan and shall be approved prior to issuance of project grading permits:

- a. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

- b. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- c. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- d. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- e. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- f. All construction equipment shall be maintained and properly tuned in accordance with manufacturers specifications. All equipment shall be checked by a certified visible emissions evaluator.
- g. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

**Section L Street Conditions**

- L1. \_\_\_\_\_ Parking shall be prohibited along the south side of the project road and along both sides of the road by lots 8-10. The parking prohibition shall be indicated by painting the face and top of curb red.
- L2. \_\_\_\_\_ All streets, sidewalks, curbs, and gutters adjacent to this subdivision shall be improved as necessary to connect improvements constructed within this subdivision to existing improvements. Any existing street, sidewalk, curb, gutter, or other existing improvement which in the sole opinion of the City Engineer is damaged - either on or adjacent to - the project site, shall be repaired by the Developer to the satisfaction of, and in the manner required by, the City Engineer.
- L3. \_\_\_\_\_ The name of the project road shall be subject to review and approval in accordance with City Council Resolution No. 68-2003.
- L4. \_\_\_\_\_ All mailbox locations shall be constructed and grouped in accordance with U.S. Postal Service standards, and the grouping of mailboxes shall be architecturally treated to reduce massing and visual impact. All mailbox locations are subject to review and approval of the Community Development Department and the U.S. Postal Service.
- L5. \_\_\_\_\_ The Developer shall design and install any traffic calming/control devices such as rumble strips, a flashing yellow light (on an interim basis), and/or a traffic signal (on a

permanent basis at or east of the project entrance road) in accordance with the Traffic Impact Analysis prepared for the development.

### **Section M Drainage Conditions**

- M1. \_\_\_\_\_ The stormwater detention basins shall be sized and constructed to accommodate the stormwater flows solely created by the project.
- M2. \_\_\_\_\_ All ditches for conveying stormwater runoff shall be constructed of tan-colored reinforced concrete and shall have a maximum longitudinal slope of 10%. All stormwater runoff from impervious areas shall be treated and contaminants removed prior to discharge from the site or into a natural water channel. The design of the detention and treatment facilities shall be subject to the approval of the City Engineer and Community Development Director and shall include, but not be limited to, the installation of drywells for percolation.
- M3. \_\_\_\_\_ All drainage collection (ditches, storm drains, etc.) and treatment facilities, and access to such facilities, shall be located in public storm drain easements, which shall be shown on the final map. City personnel or contracted forces shall have the right of access to conduct inspections and maintenance of all on-site drainage devices. Maintenance of such facilities shall be the responsibility of the HOA and/or CFD.
- M4. \_\_\_\_\_ The Mosquito and Vector Control District and its contractors shall have the right of access to conduct inspections and maintenance of all on-site drainage devices.
- M5. \_\_\_\_\_ All roofs shall have rain gutters with rainwater leaders that directly discharge into an on-lot underground system which discharges through the face of curb at streets or into a concrete-lined ditch or storm drain inlet.
- M6. \_\_\_\_\_ The improvement plans shall reflect that all on-site storm drain inlets shall be labeled "No Dumping — Drains to Creek" using thermoplastic stenciling or equivalent permanent method, subject to City approval.
- M7. \_\_\_\_\_ The Developer shall comply with all rules, regulations, and procedures of the National Pollution Discharge Elimination System (NPDES) as promulgated by the California State Water Resources Control Board (SWRCB), the San Francisco Bay RWQCB, and the Contra Costa County Clean Water Program. The project management and design shall include BMPs during construction and post-construction phases for the elimination of storm water pollutants to the maximum extent practicable.
- M8. \_\_\_\_\_ The Developer shall provide proof that a "Notice of Intent" has been filed with the State Regional Water Quality Control Board. Prior to acceptance of the subdivision the Developer shall provide proof to the City that the "Notice of Intent" has been closed out by the State Regional Water Quality Control Board.

- M9. \_\_\_\_\_ Prior to the issuance of a grading permit, the Developer shall prepare and submit to the City a Stormwater Pollution Prevention Plan (SWPPP) in conformance with the requirements set forth by the RWQCB. The SWPPP shall include pre-construction, construction, and post-construction BMPs. The SWPPP shall also include, but not be limited to:
- a) Sampling (pre-construction, during construction, and post-construction) of the stormwater outfall at Mount Diablo Creek for sediments in accordance with State Construction General Permit (CGP) regulations.
  - b) Hydro-seeding or landscaping of all disturbed areas.
  - c) BMPs, including landscaping or hydro-seeding of front and rear yards prior to acceptance of the subdivision.
  - d) A site spill response plan.
  - e) An erosion control plan including such items as installation of berms, silt fences, sedimentation basins and other measures to minimize off-site transport of soil. Topsoil should be stockpiled during grading and distributed over the ground surface after grading has been completed.
  - f) Location of construction staging and materials storage areas.
  - g) On-site retention and treatment of stormwater through the use of water quality basins, grassy swales, biofilters and/or other methods acceptable to the City Engineer and the RWQCB. The project shall mitigate runoff quantities to the extent currently required by the City's NPDES Permit and Municipal Separate Storm Sewer System permit.
  - h) Installation of structural treatment facilities to remove total suspended solids and total petroleum hydrocarbon products to the extent currently required by the RWQCB, or to the satisfaction of the City Engineer. The methods and designs shall be shown on the grading and improvement plans, as appropriate, for review and approval by the City Engineer.
- M10. \_\_\_\_\_ Prior to commencement of any site work that will result in a land disturbance of one acre or more, the Developer shall provide evidence to the City that the requirements for a stormwater State CGP have been met.
- M11. \_\_\_\_\_ The Developer shall ensure that all project contractors shall conform to the requirements of the "Best Management Practices for Construction Sites" required by the City, including detention and/or filter materials to preclude an increase in water quantity and quality impacts from debris and sediments entering the stormwater system over "non-development" conditions.
- M12. \_\_\_\_\_ The Developer shall offer for dedication to the City easements for drainage improvements. The volume and rate of stormwater runoff from the site shall not exceed the amounts allowed by Section C.3 of the City's stormwater permit. The project shall bear the financial responsibility of the construction and perpetual maintenance (including monitoring and reporting) of these facilities with a funding mechanism acceptable to the City that addresses costs for capital replacement, inflation, and administration.

- M13. \_\_\_\_\_ The Developer shall prepare an operations and maintenance plan, including a schedule for ongoing maintenance and replacement, for the stormwater facilities. The plan shall be submitted for review and approval of the City Engineer prior to recordation of the final map.
- M14. \_\_\_\_\_ The quantity and rate of stormwater runoff may take into consideration any applicable comments from the Contra Costa County Flood Control and Water Conservation District (FC District) to ensure that the quantity and creation of runoff from the site does not exceed historic rates and does not adversely impact downstream drainage facilities.
- M15. \_\_\_\_\_ The Developer shall provide all project property owners with Clean Water Program educational materials.
- M16. \_\_\_\_\_ The Developer shall construct the County Standard Plan Headwall Structure at the outfall proposed at the easterly property limits.

#### **Section N Utility Conditions**

- N1. \_\_\_\_\_ The Developer shall dedicate an 8-foot-wide public utility easement along project's entire frontage on the west side of the Mitchell Canyon Road.
- N2. \_\_\_\_\_ Sanitary sewers shall have a maximum depth of 10 feet from finished grade to invert.
- N3. \_\_\_\_\_ The Developer shall connect to the sanitary sewer system, obtain applicable permits, and pay applicable fees required by the City of Concord Public Works Department.
- N4. \_\_\_\_\_ The width of access and maintenance easements for underground facilities shall be twice the depth of the facility with a minimum width of 10 feet.
- N5. \_\_\_\_\_ Streetlights shall be provided on the project road. Streetlight standards and photometrics showing levels of illumination shall be submitted for the review and approval of the Community Development Department. "Cut-off" fixtures and downward-oriented fixtures shall be used to minimize spillover of lighting into residences.
- N6. \_\_\_\_\_ Street lighting shall be installed and activated prior to occupancy of the first residence.
- N7. \_\_\_\_\_ Developer shall pay for the cost of installation, activation, and electrical usage until final acceptance of subdivision improvements by the City Council.
- N8. \_\_\_\_\_ The Developer shall prepare a construction traffic plan for the review and approval of the City Engineer which addresses the following issues:

- a) All construction traffic associated with the development of the proposed subdivision safely enters and exits the site from Mitchell Canyon Road.
  - b) Temporary warning devices (e.g., mobile reader boards) shall be located north and south of the project site entrance to alert motorists of turning movements by construction vehicles.
- N9. \_\_\_\_\_ Prior to filing of the final map, the Developer shall provide an interest-bearing, non-refundable cash deposit or cash bond, in an amount to be determined by the City Engineer, for use by the City in the completion of the improvements as shown on the tentative map at some undetermined time in the future.
- N10. \_\_\_\_\_ Prior to approval of any grading or construction plans or maps, the Developer shall provide any necessary rights of entry, drainage easements, slope and/or grading easements, as may be required by the City Engineer, from adjoining property owners.
- N11. \_\_\_\_\_ All work shall be designed and constructed in accordance with the Municipal Code, as well as the City's Standard Plans, Contra Costa County plans where applicable, and Specifications.
- N12. \_\_\_\_\_ Upon recording of the final map, the City shall be given a full size, reproducible, Mylar photocopy of the recorded map and an electronic file of the map in a form which can be imported into AutoCAD, and configured as directed by the City Engineer.
- N13. \_\_\_\_\_ Upon completion of the improvements and prior to City Council acceptance, the City shall be given a full size, reproducible copy of the improvement plans, and an electronic version in AutoCAD, annotated to reflect any changes that occurred during construction and signed by the Project Engineer, on USB key or other means acceptable to the City Engineer.
- N14. \_\_\_\_\_ Should the construction of any offsite improvements shown on the tentative map or required in these conditions of approval, necessitate the acquisition of sufficient title or interest in lands not controlled by the Developer, the Developer shall make a good faith effort to obtain the necessary title or interest prior to the filing of the final map pursuant to Section 66457 of the Subdivision Map Act. If the Developer is unable to obtain the necessary title or interest and has demonstrated a good faith effort to the City's satisfaction (including, but not limited to, preparation of an appraisal and submittal of a bona fide offer based on the appraisal), the City shall approve the final map, and, within 120 days of filing of the final map, obtain the necessary title or interest in accordance with Section 66462.5 of the Subdivision Map Act. The Developer shall pay for all costs, including City's legal, overhead, and administrative costs, involved in the acquisition of the necessary title or interest.
- N15. \_\_\_\_\_ At the City's sole discretion, if the Developer has made the good faith effort described above and was not able to obtain the required rights of entry or easements, in lieu



of the City obtaining the necessary rights of entry and/or easements, the City may allow the proposed improvements to be modified to eliminate the need for such rights of entry and/or easements. Should the City allow such modifications and prior to the filing of the final map, the Developer shall provide a non-refundable cash deposit or cash bond, in an amount to be determined by the City Engineer, for use by the City in the completion of the improvements as shown on the tentative map at some time in the future.

N16. \_\_\_\_\_ All new utility lines shall be underground including those crossing Mitchell Canyon Road.

**Section O ADVISORY NOTES**

THE FOLLOWING INFORMATION DOES NOT CONSTITUTE CONDITIONS OF APPROVAL. IT IS PROVIDED TO ALERT THE APPLICANT TO LEGAL REQUIREMENTS OF THE CITY AND OTHER PUBLIC AGENCIES TO WHICH THIS PROJECT MAY BE SUBJECT.

**NOTICE OF 90-DAY OPPORTUNITY TO PROTEST FEES, DEDICATIONS, RESERVATIONS, OR OTHER EXACTIONS PERTAINING TO THE APPROVAL OF THIS PERMIT.**

This notice is intended to advise the applicant that pursuant to Government Code Section 66000, et seq., the applicant has the opportunity to protest fees, dedications, reservations, and/or exactions required as part of this project approval. The opportunity to protest is limited to a 90-day period after the project is approved.

The ninety (90) day period, in which you may protest the amount of any fee or the imposition of any dedication, reservation, or other exaction required by this approved permit, begins on the date this permit was approved. To be valid, a protest must be in writing pursuant to Government Code Section 66020 and delivered to the Community Development Department within 90 days of the approval date of this permit.

- A. The applicant/owner should be aware of the expiration dates and renewing requirements prior to recording the Final Maps.
- B. Comply with the requirements of the Concord Sanitary District.
- C. Comply with the requirements of the Contra Costa Water District.
- D. Comply with the requirements of the Consolidated Fire Protection District.
- E. Comply with the requirements of the Health Services Department, Environmental Health Division.
- F. Comply with the requirements of the Contra Costa County Building Inspection Department. Building permits are required prior to the construction of the proposed residences.
- G. This project may be subject to the requirements of the CDFW. It is the applicant's responsibility to notify the CDFW, P.O. Box 47, Yountville, California 94599, of any

proposed construction within this development that may affect any fish and wildlife resources, per the CDFW Code.

- H. This project may be subject to the requirements of the USACE. It is the applicant's responsibility to notify the appropriate district of the USACE to determine if a permit is required, and if it can be obtained.

end.

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**Diablo Meadows Project  
Initial Study/Mitigated Negative Declaration  
ENV-01-2020**



**City of Clayton  
Community Development Department  
6000 Heritage Trail  
Clayton, California 94517  
(925) 673-7340**

**September 2020**

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**APPENDICES**

- Appendix A: CalEEMod Modeling Results
- Appendix B: Planning Survey Report
- Appendix C: Geotechnical Investigation
- Appendix D: Phase 1 Environmental Site Assessment

## INTRODUCTION

DeNova Homes, Inc., has proposed to subdivide a portion of an 8.68-acre site into 18 single-family residential lots. The project site is bound by single-family homes to the north, northwest, south and east. Mitchell Canyon Road borders the project site to the east, and the CEMEX Clayton Quarry is located approximately 1,000 feet to the south of the site. Clayton city limits border the southern and western boundaries of the project site.

This Initial Study/Mitigated Negative Declaration (IS/MND) identifies potentially significant environmental impacts for the following environmental areas:

- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials; and
- Noise.

Environmental analysis determined that measures were available to mitigate potential adverse impacts to insignificant levels. As a result, a Mitigated Negative Declaration has been prepared pursuant to Public Resources Code Section 21064.5, and Article 6 of the California Environmental Quality Act (CEQA) Guidelines.

Pursuant to the requirements of CEQA Guidelines Section 15071, this Mitigated Negative Declaration describes the proposed project; identifies, analyzes, and evaluates the potential significant environmental impacts, which may result from the proposed project; and identifies measures to mitigate adverse environmental impacts. With implementation of the included mitigation measures, the project would not have a significant impact on the environment.

## PROJECT/APPLICANT INFORMATION

1. Project Title: Diablo Meadows Project
2. Lead Agency Name and Address: City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517
3. Contact Person and Phone Number: Matthew Feske  
Community Development Director  
City of Clayton  
(925) 673-7343
4. Project Location: West of Mitchell Canyon Road  
and north of Herriman Court  
Clayton, CA 94517
5. Project Sponsor's Name and Address: DeNova Homes, Inc.  
1500 Willow Pass Court  
Concord, CA 94520  
Contact: Kerri Watt
6. Existing General Plan Designation: Single-Family Medium Density (MD)
7. Existing Zoning Designation: Single-Family Residential (R-15)
8. Proposed Zoning Designation: Planned Development (PD)
9. Project Description Summary:

The proposed project would include subdivision of the site and subsequent development of 18 single-family residential units and three accessory dwelling units (ADUs) on 18 lots within the easterly portion of an 8.68-acre subject property, while five additional parcels would be used for stormwater retention or maintained as open space, and a street right-of-way. Access to the site would be provided by a proposed private street connected to Mitchell Canyon Road, which would terminate in a turnaround. Approximately 4.36 acres of the project site would be preserved as open space. City of Clayton entitlements include a Rezone, a Development Plan Permit, a Vesting Tentative Map, Site Plan Review, and a Tree Removal Permit.

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project. The following Evaluation of Environmental Impacts identifies at least one impact that is “Less Than Significant with Mitigation Incorporated” for each of the checked environmental factors.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality                                |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources    | <input type="checkbox"/> Energy                                     |
| <input checked="" type="checkbox"/> Geology and Soils    | <input type="checkbox"/> Greenhouse Gas Emissions         | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality     | <input type="checkbox"/> Land Use and Planning            | <input type="checkbox"/> Mineral Resources                          |
| <input checked="" type="checkbox"/> Noise                | <input type="checkbox"/> Population and Housing           | <input type="checkbox"/> Public Services                            |
| <input type="checkbox"/> Recreation                      | <input type="checkbox"/> Transportation                   | <input type="checkbox"/> Tribal Cultural Resources                  |
| <input type="checkbox"/> Utilities and Service Systems   | <input type="checkbox"/> Wildfire                         | <input type="checkbox"/> Mandatory Findings of Significance         |

## ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

**Potentially Significant Impact:** An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

**Less Than Significant with Mitigation Incorporated:** An impact that requires mitigation to reduce the impact to a less-than-significant level.

**Less-Than-Significant Impact:** Any impact that would not be considered significant under CEQA relative to existing standards.

**No Impact:** The project would not have any impact.

As noted in Section 21002.1 of the California Public Resources Code, “[t]he purpose of an environmental impact report is to identify the significant effects on the environment of a project[.]” Consequently, the scope of analysis prepared for a proposed project under CEQA is only required to consider whether implementation of the proposed project would create new impacts on the environment, and such analyses are not required to demonstrate whether effects from existing environmental conditions would occur on the project. The focus of CEQA on a project’s impacts to the environment were confirmed by the California Supreme Court decision in the case of *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal. 4th 369*. The decision clarified that CEQA does not require lead agencies to analyze the impact of existing environmental conditions on a project’s future users or residents unless the project will exacerbate the existing environmental hazards or conditions. In the case of the proposed project, the focus of CEQA on a project’s impacts on the environment limits the degree to which this



CEQA analysis may address impacts that could result from existing environmental conditions on future residents. This important distinction particularly relates to on-going operations of the CEMEX quarry plant, and associated heavy-duty haul truck trips along Mitchell Canyon Road. The operations of the CEMEX quarry plant represent an existing condition of the environmental setting for the project, and implementation of the proposed project would not have the potential to alter the existing CEMEX operations or exacerbate the potential for impacts to occur due to the CEMEX quarry plant operations. Due to the focus of CEQA on a project's potential impacts on the environment, not the environment's potential effect on a project, potential effects that could be experienced by future on-site residents due to CEMEX operations, such as excess noise and vibration, traffic congestion, or exposure to air pollutants, are not within the purview of CEQA analysis. Such issues will be considered by City staff, as may be warranted, during the planning review of the project, and included within the Staff Report prepared for the proposed project.

Per Public Resources Code Section 21002.1, the analysis contained herein focuses on the potential for the proposed project to result in impacts on the environment.

## DETERMINATION

On the basis of this initial evaluation:

- I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- X I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case since the Project proponent has made revisions in the Project and has agreed to the mitigation measures listed in “Section V. List of Mitigation Measures.” I further find that the mitigation measures and the information in this study constitute a MITIGATED NEGATIVE DECLARATION in accordance with Section 15071 of the State CEQA Guidelines.
- I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

---

Matthew Feske  
Community Development Director

## **BACKGROUND**

This IS/MND identifies and analyzes the potential environmental impacts of the current proposal for the Diablo Meadows Project. The information and analysis presented in this document is organized in accordance with the order of the CEQA checklist in Appendix G of the CEQA Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that must be applied to the project are prescribed.

This IS/MND relies on site-specific studies prepared for the project, as well as information provided in the City of Clayton General Plan and associated EIR.

## **PROJECT DESCRIPTION**

A description of the project location and setting, the components of the project, and discretionary actions is provided below.

### **Site Location and Setting**

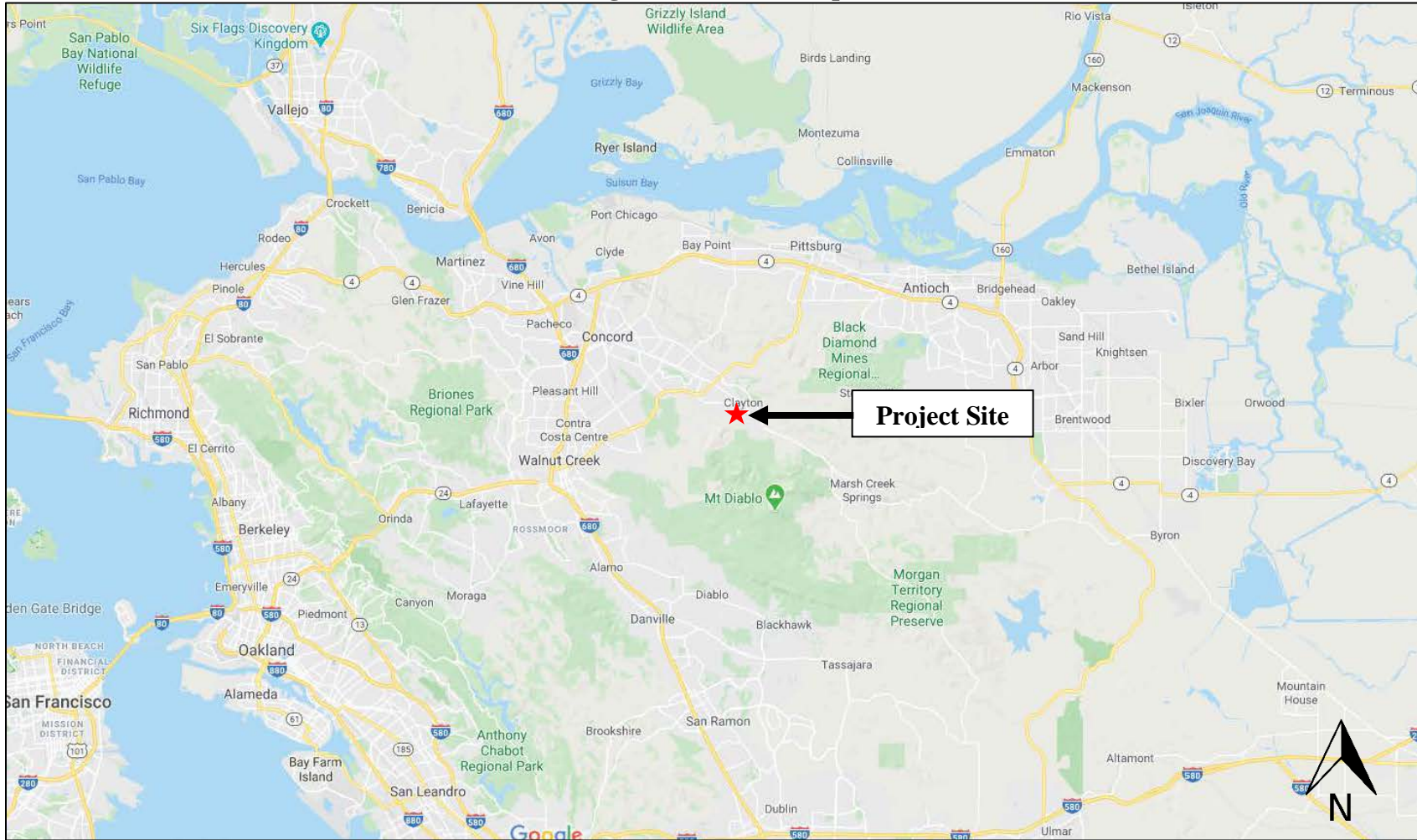
The project site consists of two parcels constituting 8.68 acres of land located west of Mitchell Canyon Road and north/west of Herriman Court in the City of Clayton, California (see Figure 1 and Figure 2). The site is identified by Assessor's Parcel Numbers (APN) 121-090-011-2 and 121-090-016-1. Clayton city limits border the southern and western boundaries of the project site; thus, the project site is within the city limits of Clayton, but the areas south and west of the project site are outside city limits, within an unincorporated portion of Contra Costa County. A portion of the site's northwestern property line is bordered by the City of Concord. The site is designated Single-Family Medium Density (MD) per the City of Clayton General Plan and zoned Single-Family Residential (R-15).

The approximately 4.32-acre development area abuts Mitchell Canyon Road and is dominated by annual grassland, but also consists of moderate growths of trees and shrubs. A shed and water well are located within the northwestern corner of the development area. The development area is generally flat with a gentle downward slope towards the west. In comparison, the 4.36-acre open space area, located within the western portion of the project site, would not be developed and contains a seasonal wetland feature and an ephemeral stream which flows south to north. Generally, the terrain within the open space area slopes steeply downward towards the north. Figure 2 depicts the project site, including the development area and the areas to be preserved as open space.

### Surrounding Land Uses

The project site is bordered primarily by single-family residences to the northwest, north, and east and south, while vacant land borders the project site to the west and southwest. Clayton city limits border the western and southern boundaries of the project site. A CEMEX quarry plant is located approximately 1,000 feet south, just beyond the vacant land bordering the project site.

**Figure 1  
Regional Location Map**



**Figure 2  
Project Site**



*\*Boundaries approximate.*

## **Project Components**

The proposed project would include grading of the development area and subsequent construction of 18 single-family, one-story residences and three ADUs on the 18 lots. The density of the proposed project would be approximately 3.9 dwelling units per acre (du/ac), which would be consistent with the current General Plan density allowance for the site (3.1 to 5.0 du/ac). The proposed residences would be accessed by a new private internal roadway connecting to Mitchell Canyon Road, which would terminate in a turnaround in accordance with East Contra Costa Fire Protection District standards. The proposed residences would be “clustered” so as to avoid grading or development on the steeper slopes and drainage features located within the open space area.

The proposed project would require approval of a Rezone, a Development Plan Permit, a Vesting Tentative Map, Site Plan Review, and a Tree Removal Permit. Each of the project components is discussed in detail below. With respect to meeting the City’s affordable housing requirements, the proposed project would develop Lot 18 as affordable housing to satisfy the City’s requirement for ten percent below-market rate homes. The primary home would be deed-restricted for rent to a moderate-income household, while an ADU would be deed-restricted for rent to a low-income household. Rental of the two units on Lot 18 would be managed by the Yellow-Roof Foundation, a non-profit public charity.

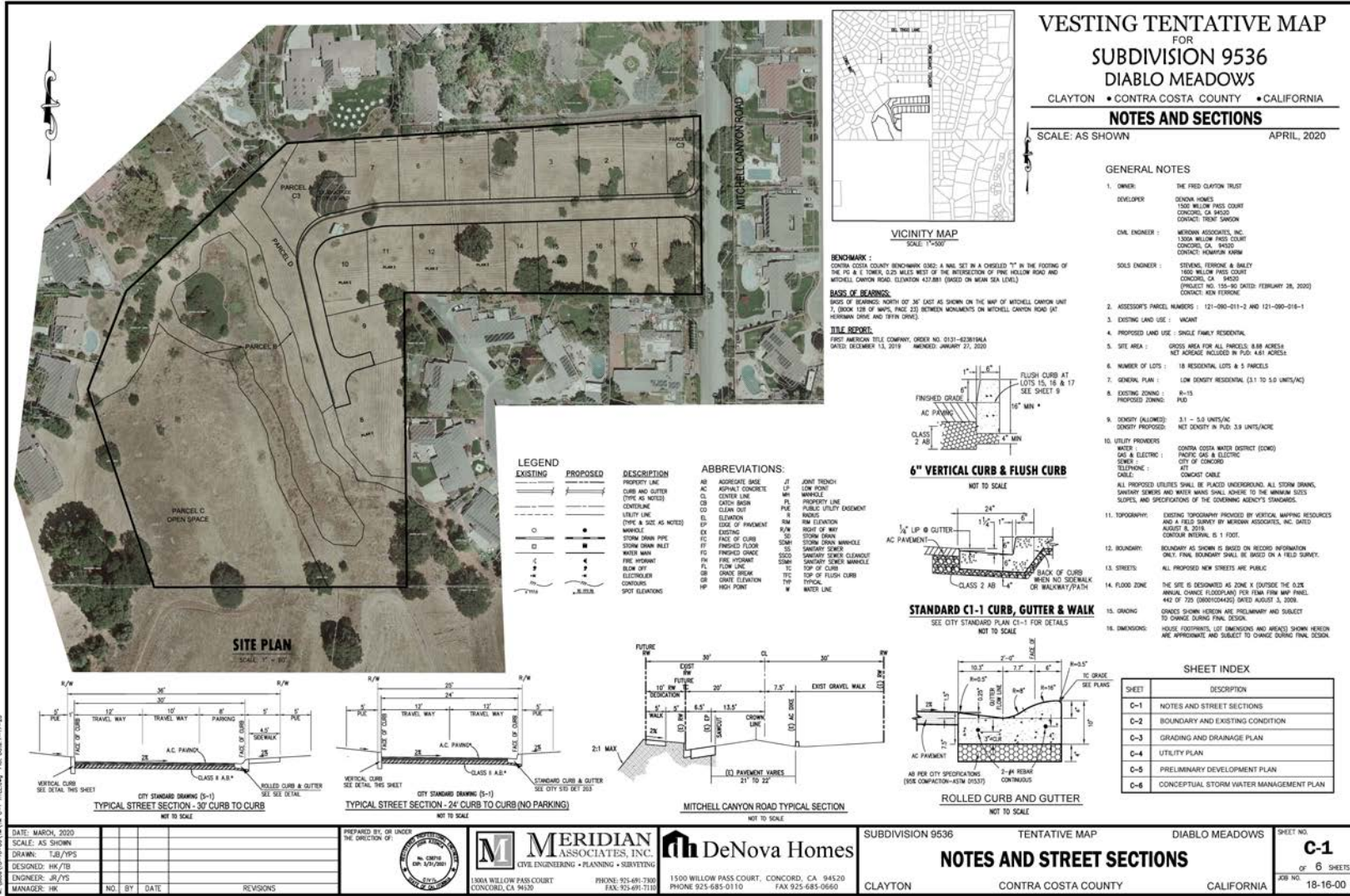
### Rezone

The project site is currently zoned R-15. An R-15 zoning designation stipulates a minimum lot size of 15,000 square feet (sf), which would allow for up to 25 lots on the 8.68-acre project site. However, due to the steep topography and sensitive environmental features within the western portion of the project site, residential development would only be feasible on approximately 4.62 acres of the project site. Buildout pursuant to the current zoning designation would result in 11 residential units and would not meet the City’s designated General Plan density range of 3.1-5.0 du/ac. Development of the project site with 18 single-family residential units would result in a proposed density of 3.9 du/ac. Therefore, the proposed project would satisfy the current land use density requirements with the approval of a request to Rezone the entire site from R-15 to Planned Development (PD) to allow for reduced lot sizes and setbacks.

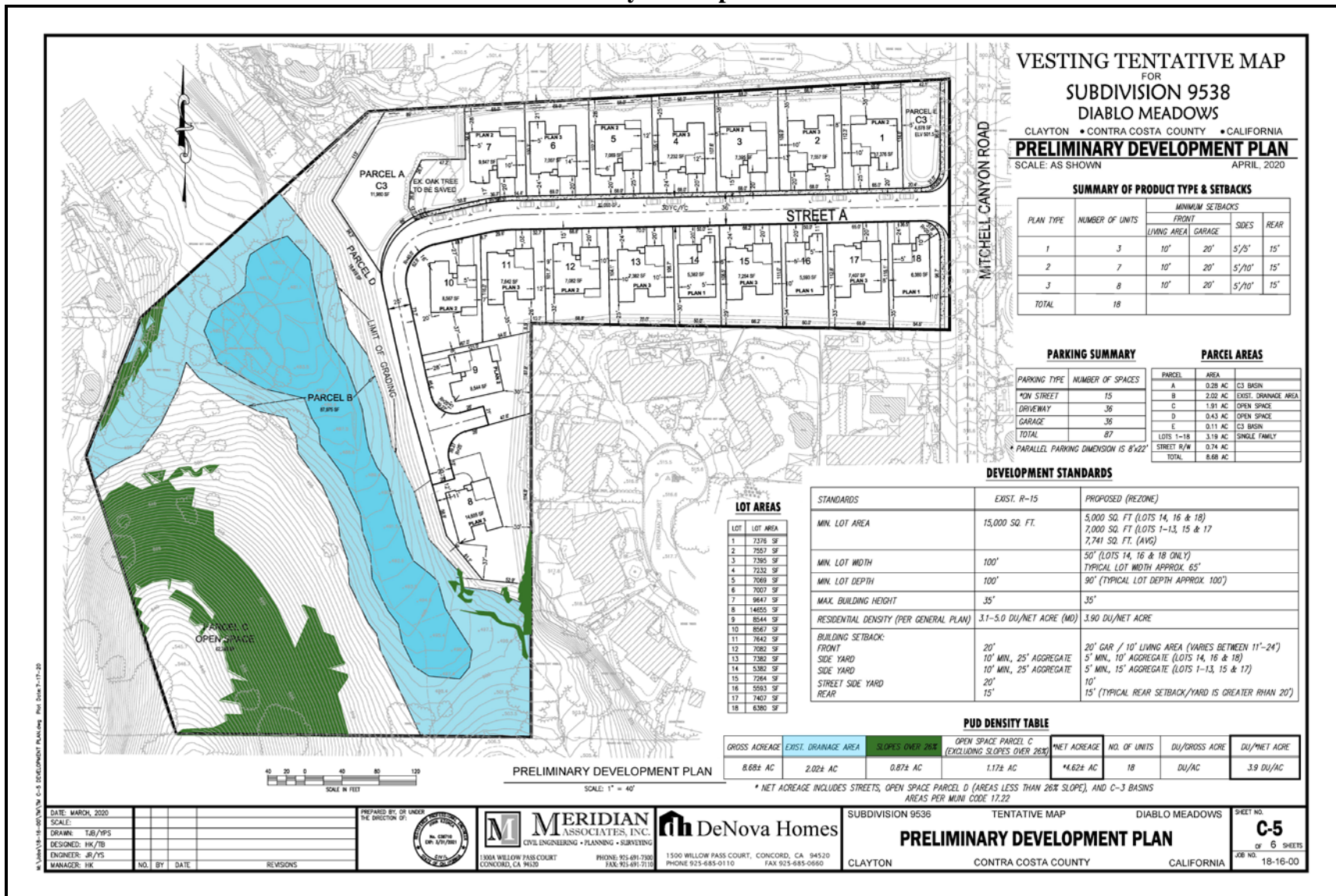
### Vesting Tentative Subdivision Map

The proposed Vesting Tentative Subdivision Map would subdivide the project site into 18 single-family residential lots, five parcels for stormwater retention and open space uses, and a street right-of-way (see Figure 3 and Figure 4). Parcels A and E would contain the two bio-retention basins, while Parcels B, C, and D, which consist of a total of 4.36 acres, would contain the open space area, inclusive of the existing seasonal wetland and ephemeral stream segments.

# Figure 3 Vesting Tentative Subdivision Map



**Figure 4  
Preliminary Development Plan**





Access to the site would be provided by a new private roadway from Mitchell Canyon Road along the eastern border of the project site, which would terminate in a turnaround. A proposed sidewalk would be provided along the project's Mitchell Creek Road frontage and along the northern side of the internal street. The open space area of the project site, which contains steep topography, a seasonal wetland, and a drainage channel, would be preserved in perpetuity and would not be affected by grading or construction activities.

### Development Plan Permit

As discussed previously, the project site would be rezoned to PD, which would require a Development Plan Permit. Development Plan considerations include, but are not limited to, architecture and landscaping, grading, and on- and off-site improvements, including utilities.

### *Architecture*

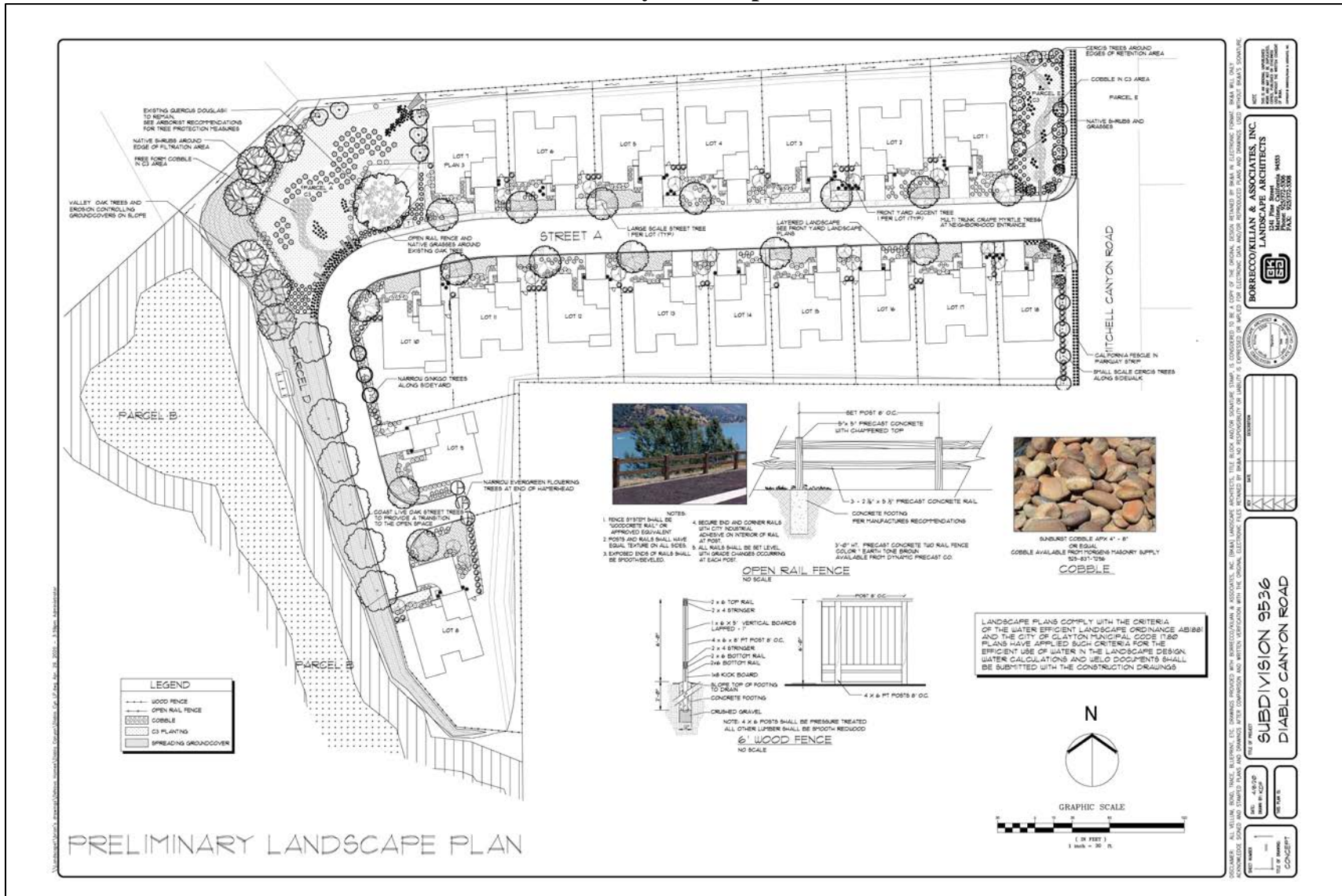
Several different floor plans and architectural styles are planned for the proposed residences. Three homes are proposed to have three bedrooms, two bathrooms, a two-car garage, with an approximately 347-sf ADU. The ADUs would be designed as studios that offer complete independent living amenities, including a living area, kitchen (including a full range and oven, refrigerator, and sink), a separate sleeping area and bathroom, and a stacked washer-dryer area. Seven homes would have either three bedrooms and 2.5 bathrooms, or four bedrooms with three bathrooms, and two-car garages. It should be noted that the four-bedroom homes would contain a second-story "pop-up" containing the fourth bedroom and third bathroom. The pop-up would be incorporated within the ridgeline of the home, thereby limiting the total height increase of the residences with pop-ups to less than four feet. The remaining eight homes would each contain four bedrooms with 2.5 bathrooms and a two-car garage.

It should be noted that the Rezone from R15 to PD would permit a reduction in lot sizes and setback requirements needed to fit all 18 single-family homes and three ADUs on the development site and ensure compliance with Single-Family Medium Density land use density requirements (3.1-5.0 du/ac). Minimum lot sizes would be reduced from 15,000 sf to an average of 7,400 sf. Proposed setbacks would be reduced from 20-feet to 10-feet for living areas; from 25 feet to 10-15 feet for side yards; and from 20 feet to 10 feet for street side yards.

### *Landscaping*

As shown in Figure 5, the proposed project would incorporate landscaping features throughout the developed portions of the project site and along the project frontage. Four plant palettes are proposed for the future residences, each including one 15-gallon tree and several one-gallon to five-gallon flowering shrubs planted in the front yards of residences. In addition, tall evergreen shrubs would be planted alongside six-foot tall wooden fences separating the residential lots.

**Figure 5  
Preliminary Landscape Plan**



Landscaping within common areas would include decorative cobble-stone within the bio-retention areas and along the project frontage (see Figure 6). Native oaks and drought-tolerant shrubs and grasses would provide erosion control near the slope between the development area and the open space area. In addition, wood-grain, two-rail open fencing would surround an existing large oak tree within Lot #7 and border the project frontage along Mitchell Canyon Road.

### *Grading*

The export or import of off-site soils would not be required as earthwork within the site is anticipated to balance. Per the Preliminary Grading Plan, the site would be graded to create building pads for the 18 residential lots and the proposed roadway (see Figure 7). A bench for the proposed western bio-retention basin would be created to the west of the proposed building pads within Lot #1 through Lot #7. The slope between the development area and the open space area would be 2:1. The western open space portion of the project site would not be affected by on-site grading.

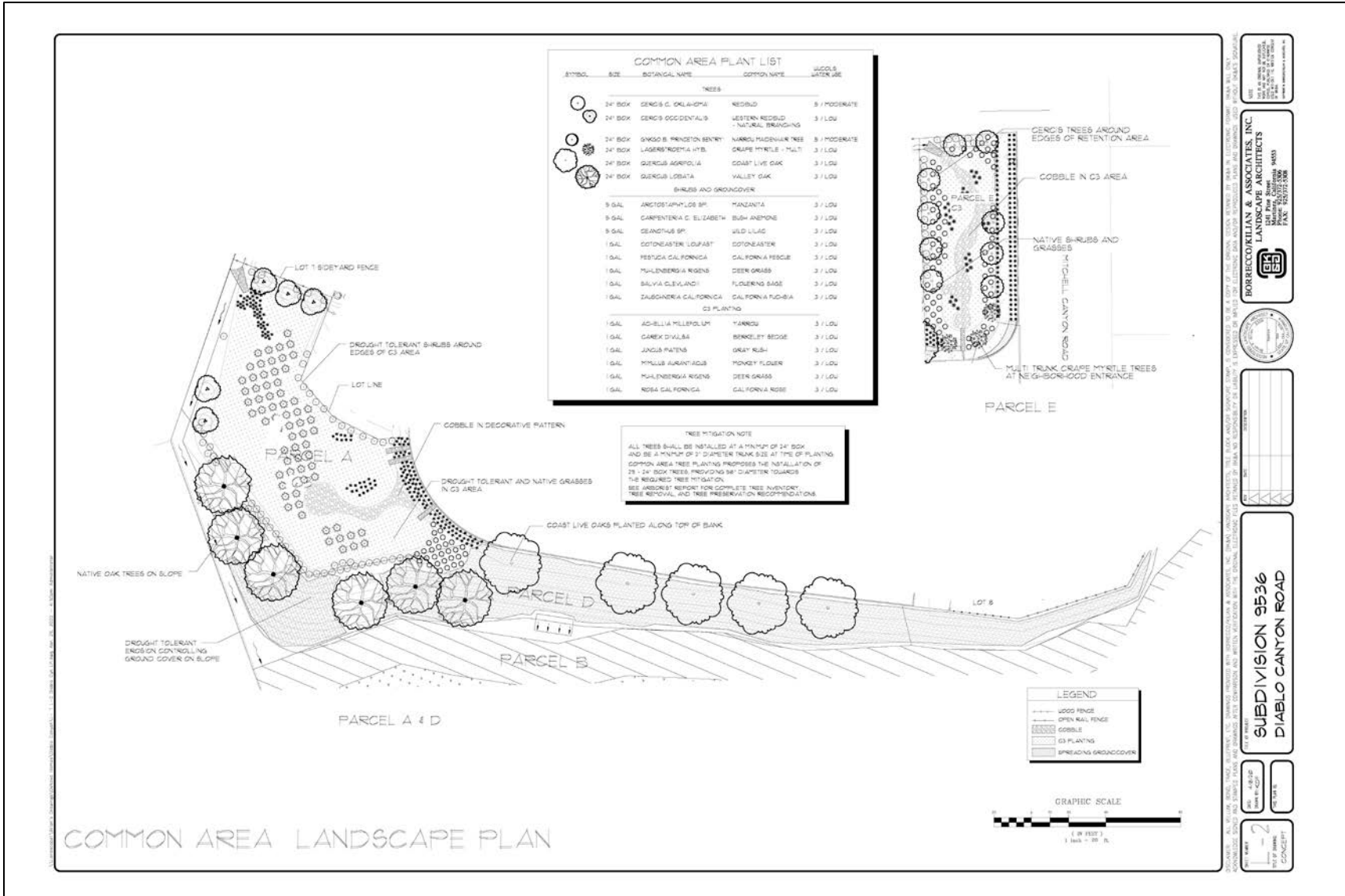
### *Utilities*

Eight-inch water and sewage connections would be installed within the proposed roadway and connect to existing water and sewer infrastructure within Mitchell Canyon Road (see Figure 8). With respect to stormwater, runoff from pavement and rooftop areas from the western-most residences would drain to a new bio-retention basin west of Lot #7. Treated stormwater from the bio-retention basin would flow through an 18-inch storm drain within the new internal roadway and discharge through a proposed storm drain outfall within the open space area (Parcel D). The storm drain outfall would incorporate an energy dissipator to slow discharged water and protect slopes from erosion. Stormwater from the eastern-most residences, nearer to Mitchell Canyon Road, would flow into the proposed bio-retention basin east of Lot #1. Treated water from the eastern bio-retention basin would flow through a new 12-inch storm drain connecting to an existing storm drain within Mitchell Canyon Road.

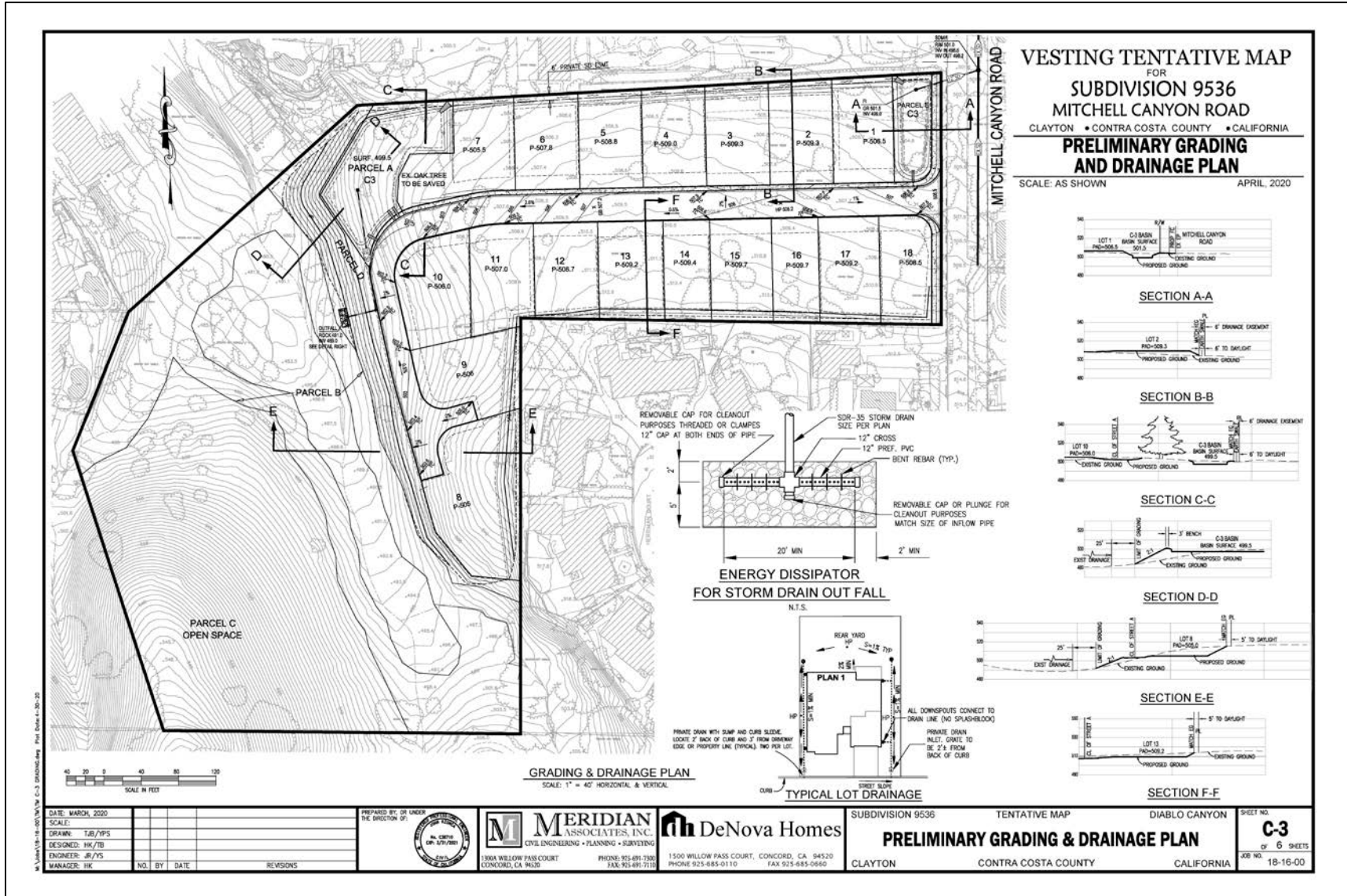
### Development Plan Review

All development occurring on the project site would be subject to Development Plan Review consistent with Chapter 17.44 of the Clayton Municipal Code. The Development Plan Review process would include a review of the exterior appearance of all proposed facilities and structures to ensure compliance with the City's established General Plan policies. Importantly, the proposed residences would incorporate design features intended to reflect the rural character of surrounding development, including, but not limited to, single-story development not more than 27 feet in height, wood-grain two-rail open fencing, and preservation of on-site open space and the existing drainage channel.

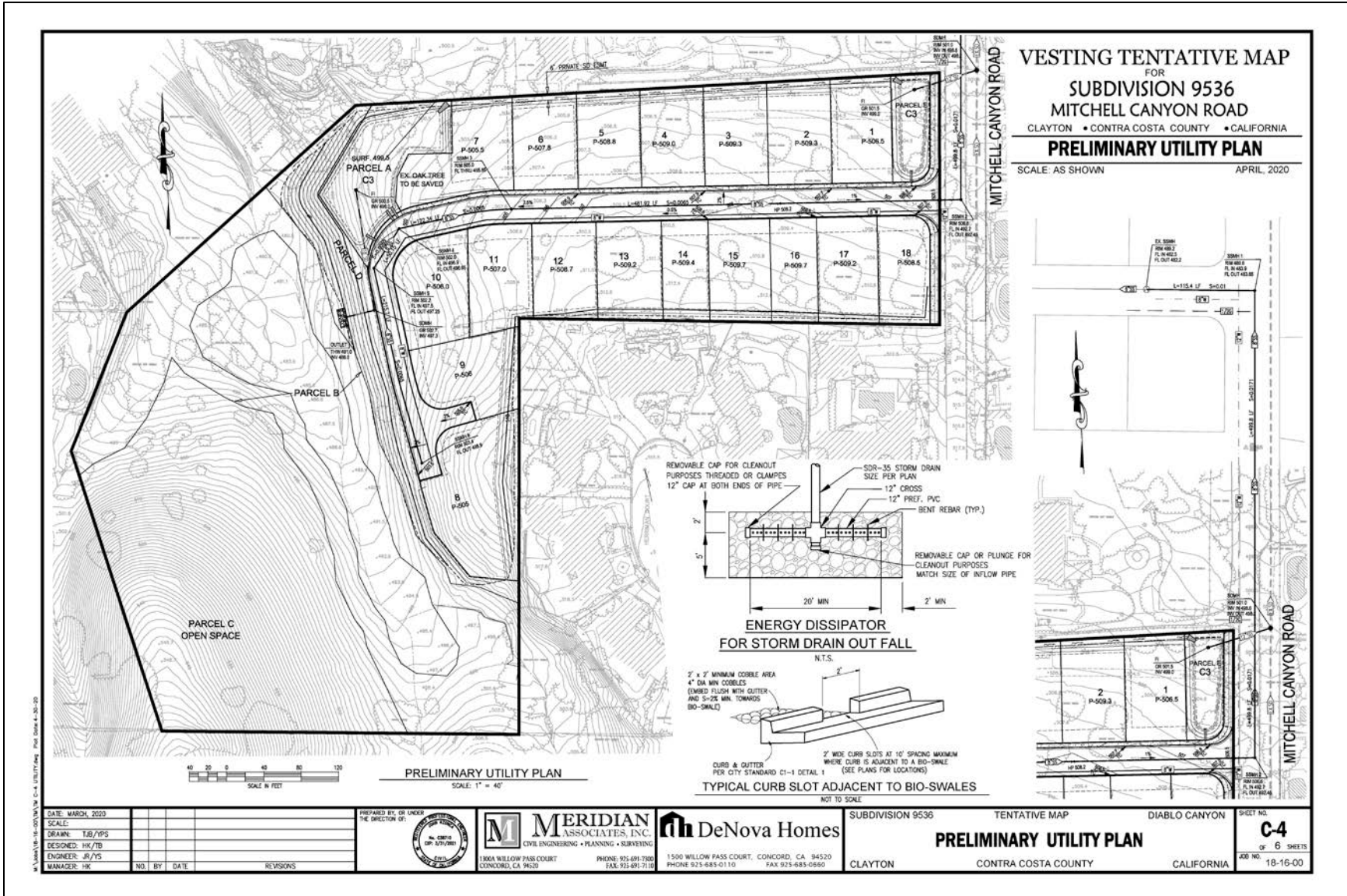
**Figure 6  
Common Area Landscape Plan**



**Figure 7**  
**Preliminary Grading and Drainage Plan**



**Figure 8  
Preliminary Utility Plan**



## Tree Removal Permit

Per the Arborist Report prepared for the project site, 58 trees are located within the project site or in close enough proximity to suffer potential root damage from development. Of the 37 trees recommended for removal, 34 are protected species according to the City of Clayton Tree Protection Ordinance. Therefore, the proposed project would require approval of a Tree Removal Permit to remove the existing trees. The largest tree on-site, a large blue oak tree, would be preserved and incorporated into Lot #7.

## **Discretionary Actions**

As discussed in detail above, the proposed project would require the following approvals from the City of Clayton:

- Rezone;
- Vesting Tentative Subdivision Map;
- Development Plan Permit;
- Development Plan Review; and
- Tree Removal Permit.

## **LIST OF MITIGATION MEASURES**

***Mitigation Measure 1.*** *The project applicant shall be subject to pay all required fees associated with development in Zone 2 of the ECCCHCP/NCCP prior to the start of construction at the current fee rate in place at that time.*

***Mitigation Measure 2.*** *Preconstruction Survey.* *Prior to any ground disturbance related to covered activities, a USFWS/CDFW-approved biologist shall conduct a preconstruction survey in areas identified in the planning surveys as supporting suitable breeding or denning habitat for San Joaquin kit fox. The surveys shall establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines (U.S Fish and Wildlife Service, 1999).*

*The preconstruction survey shall be conducted within 30 days of ground disturbance. On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership will not be surveyed. The status of all dens shall be determined and mapped. Written results of the preconstruction survey shall be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance. Concurrence is not required prior to initiation of covered activities.*

***Avoidance and Minimization Measures.*** *If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the project applicant shall comply with the following avoidance and minimization requirements:*

- *If a San Joaquin kit fox den is discovered within the proposed development footprint, the den shall be monitored for three days by a USFWS-CDFW-approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.*
- *Unoccupied dens should be destroyed immediately to prevent subsequent use.*
- *If a natal or pupping den is found, USFWS and CDFW shall be notified immediately. The den shall not be destroyed until the pups and adults have vacated and further consultation with USFWS and the CDFW has been performed.*
- *If kit fox activity is observed at the den during the initial monitoring period, the den shall be monitored for an additional five consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied, the den may be excavated under the direction of the biologist. Alternatively, if the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgement of a biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities).*
- *If San Joaquin kit fox dens are identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances shall be demarcated. The configuration of exclusion zones shall be circular, with a radius measured outward from the den entrance(s). No covered activities shall occur within the exclusion zones. Exclusion zone radii for potential dens shall be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by the kit fox.*

**Mitigation Measure 3.**      Preconstruction Survey. *Prior to any ground disturbance related to covered activities, a USFWS/CDFW-approved biologist shall conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The survey shall establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995).*

*On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership shall not be surveyed. Surveys shall take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. Surveys shall take place no more than 30 days prior to construction. During the breeding season (February 1 to August 31), surveys shall document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1 to January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results shall be valid only for the season (breeding or nonbreeding) during which the survey is conducted.*



*Avoidance and Minimization Measures.* If burrowing owls are found during the breeding season (February 1 to August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance shall include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 to January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a buffer zone (described below).

During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur shall be established around each occupied burrow (nest site). Buffer zones of 160 feet shall be established around each burrow being used during the nonbreeding season. The buffers shall be delineated by highly visible, temporary construction fencing.

If occupied burrows for burrowing owls are not avoided, passive relocation shall be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

**Mitigation Measure 4.** Prior to implementation of covered activities, a qualified biologist shall conduct a preconstruction survey to establish whether nests of golden eagles are occupied. If nests are occupied, minimization requirements and construction monitoring shall be required.

Covered activities shall be prohibited within 0.5-mile of active nests. Nests can be built and active at almost any time of the year, although mating and egg incubation occurs late January through August, with peak activity in March through July. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the Implementing Entity shall coordinate with CDFW/USFWS to determine the appropriate buffer size.

Construction monitoring shall focus on ensuring that no covered activities occur within the buffer zone established around an active nest. Although no known golden eagle nest sites occur within or near the Urban Limit Line, covered activities inside and outside of the Preserve System have the potential to disturb golden eagle nest sites. Construction monitoring shall ensure that direct effects to golden eagles are minimized.

**Mitigation Measure 5.** Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15-August 31), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether white-tailed kite is nesting in trees in or visible from the site. The findings of the survey shall be submitted

to the Community Development Department. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.

**Mitigation Measure 6.** *If work is scheduled to take place between February 1 and August 31, a pre-construction nesting bird survey shall be conducted by a qualified biologist within 14 days of construction. The findings of the survey shall be submitted to the Community Development Department. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.*

**Mitigation Measure 7.** *The proposed project shall be designed in compliance with stream setback requirements set forth in Conservation Measures 1.7 and 2.12 of the ECCCHCP/NCCP, including the following avoidance and minimization measures:*

- *All wetlands to be avoided by covered activities shall be temporarily staked in the field by a qualified biologist, and a 25-foot buffer zone shall be implemented along the seasonal wetland swale and between the ephemeral streams and development activities.*
- *Herbicides shall not be applied within the buffer area around ephemeral streams or the seasonal wetland swale unless needed to control serious invasive plants. In such a case, herbicides that have been approved by the EPA for use in or adjacent to aquatic habitats may be used as long as label instructions are followed and applications avoid or minimize impacts on covered species and their habitats. Appropriate herbicides shall be applied to the ruderal grassland within the buffer area during the dry season to control non-native invasive species such as yellow star-thistle. Herbicide drift shall be minimized by applying the herbicide as close to the target area as possible.*
- *Personnel conducting ground-disturbing activities within or adjacent to the buffer zone of the ephemeral streams or the seasonal wetland swale shall be trained by a qualified biologist in the avoidance and minimization measures set forth by this IS/MND and the permit obligations of the project proponents working under the ECCCHCP.*

**Mitigation Measure 8.** *Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. No construction or maintenance vehicles shall be refueled within 200 feet of ephemeral streams or the seasonal wetland swale unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill. In addition, trash generated during project construction shall be promptly removed from the site.*

**Mitigation Measure 9.** *The proposed project shall be implemented in compliance with the hydrologic maintenance and erosion minimization measures set forth in Conservation Measures 1.10 and 2.12 of the ECCCHCP/NCCP. Standard construction best management practices (BMPs) shall be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs shall include the use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences, or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydromulch.*

*Appropriate erosion-control measures (e.g. fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into the ephemeral streams or the seasonal wetland swale. Filter fences and mesh shall be of material that shall not entrap reptiles or amphibians. Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians. Fiber rolls used for erosion control shall be certified as free of noxious weed seed. Seed mixtures applied for erosion control shall not contain invasive non-native species, and shall be composed of native species or sterile non-native species.*

**Mitigation Measure 10.** *The following tree protection measures shall be implemented pursuant to the recommendations listed in the Arborist Report, to the extent feasible:*

- *The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to identify the location of the existing trees to be retained, as identified in the Arborist Report;*
- *A five-foot tree protection zone shall be established from the northern and southern fence lines extending into the development area where no foot, vehicle, storage, or any other intrusion shall be allowed during all construction phases. Prior to installation of new landscaping and fencing along property lines, protected trees on property lines shall not be disturbed within the tree protection zone;*
- *Landscaping around the protected oak (Tree #37) on-site shall be limited to mowing weeds, installing a layer of cardboard, and maintaining two inches of wood chip mulch on the soil surface;*
- *Fences along the northern and southern borders shall require absolutely no grading or digging within five radial feet of all protected tree trunks;*
- *New trees shall be selected, installed, and maintained as per requirements of the City of Clayton; and*
- *If a new fence line is established for the property, rather than demolishing and reinstalling the existing fence line, four border trees shall be preserved.*

**Mitigation Measure 11.** *Prior to the initiation of ground-disturbing activities, the potential for root damage shall be minimized through compliance with the following recommendations listed in the arborist report:*

- *Air spading shall be performed along property lines within the northern and southern portions of the project site;*
- *All exposed roots shall be pruned using sharp sawzall blades;*
- *Pruned roots shall be covered with soil.*

**Mitigation Measure 12.** *Prior to the initiation of ground-disturbing activities, the potential for crown damage shall be minimized through compliance with the following recommendations listed in the arborist report:*

- *Crowns shall be raised as specified to allow for vehicle and equipment clearance:*
  - *Crowns shall be raised 16 feet above the existing grade;*
  - *50 percent of live crown ratio shall be maintained;*
  - *Thinning cuts shall be made two inches in diameter or smaller;*

- Downward growing branches from zero to 15 feet above grade shall be removed;
- Branches larger than two inches in diameter shall be shortened by heading the branches back to at least half of their diameters; and
- No more than 25 percent of a crown is to be removed in one season

**Mitigation Measure 13.** A tree replacement plan for the removal of 152 inches of cumulative trunk diameter of protected tree species shall be prepared in accordance with Municipal Code Section 15.070.040 A1.or A.2., or, subject to determination by the Community Development Director or Planning Commission, the applicant must pay an in-lieu fee to the City for the purchase and installation of trees of equivalent value.

**Mitigation Measure 14.** Prior to the issuance of a grading permit, the grading plan shall include a requirement (via notation) indicating that if cultural resources, or human remains are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City, at the expense of the project applicant, shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken.

**Mitigation Measure 15.** Pursuant to State Health and Safety Code §7050.5(c) and State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop within 100 feet of the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the Most Likely Descendant (MLD). The MLD shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work shall not take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist at the applicant's expense, until the preceding actions have been implemented.

**Mitigation Measure 16.** Prior to approval of the improvement plans for the project, all recommendations from the Geotechnical Report prepared for the project by Stevens, Ferrone, & Bailey Engineering Company, Inc (2020) shall be incorporated into the improvement plans to the satisfaction of the City Engineer. In addition, the applicant shall retain a California Registered Geotechnical Engineer to perform field observations during grading. Compliance with the recommendations of the Geotechnical Engineer shall be provided to the City Engineer.

**Mitigation Measure 17.** Prior to the issuance of a grading permit, the project applicant shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:

- Hydro-seeding;

- *Placement of erosion control measures within drainage ways and ahead of drop inlets;*
- *The temporary lining (during construction activities) of drop inlets with “filter fabric”;*
- *The placement of straw wattles along slope contours;*
- *Use of a designated equipment and vehicle “wash-out” location;*
- *Use of siltation fences;*
- *Use of on-site rock/gravel road at construction access points; and*
- *Use of sediment basins and dust palliatives.*

***Mitigation Measure 18.*** *Prior to initiation of any ground disturbance activities, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from Contra Costa Health Services and properly abandon the on-site well to the satisfaction of the Contra Costa Health Services Department. Proof of abandonment shall be provided to the City of Clayton Community Development Department and City Engineer.*

***Mitigation Measure 19.*** *During grading and construction, the project contractor shall ensure that the following measures are implemented:*

- *Grading and construction activities shall be limited to the daytime hours between 7:00 AM to 5:00 PM Monday through Friday, as specified in Section 15.01.101 of the Clayton Municipal Code. Any such work beyond said hours and days is strictly prohibited unless previously specifically authorized in writing by the City Engineer or designee or by project conditions of approval;*
- *The distances between on-site construction and demolition staging areas and the nearest surrounding residences shall be maximized to the extent possible; and*
- *All construction and demolition equipment that utilizes internal combustion engines shall be fitted with manufacturer’s mufflers or equivalent.*

# EVALUATION OF ENVIRONMENTAL IMPACTS

## 1. AESTHETICS.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. **Would the project have a substantial adverse effect on a scenic vista?..... No Impact**

Discussion (a.)

For purposes of this analysis, scenic vistas would be officially designated mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. The City of Clayton General Plan identifies the protection of scenic resources as a core concern for future development and planning. Impacts to the views of open spaces or vistas would diminish the rural character of the City, and should be avoided. However, the City’s General Plan does not contain any policies that address scenic vistas, nor does the General Plan define or identify any specific scenic vistas. Thus, the proposed project would not have a substantial adverse effect on a scenic vista, and *no impact* would occur.

- b. **Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? ..... No Impact**

Discussion (b.)

According to the California Scenic Highway Mapping System, two highways in Contra Costa County are officially-designated State Scenic Highway corridors: <sup>1</sup> Interstate 680 (I-680), from the Alameda County line to the junction with State Route (SR) 24; and SR 24

<sup>1</sup> California Department of Transportation. *Scenic Highways*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed July 2020.

from the east portal of the Caldecott tunnel to I-680 near Walnut Creek. Neither of the aforementioned corridors provide views of Clayton or the project site. Accordingly, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, or historic buildings within a State Scenic Highway. Thus, the project would result in *no impact*.

- c. **In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? .....Less-Than-Significant Impact**

Discussion (c.)

The project site would be divided between an undeveloped open space area, which contains an existing wetland and steep hillside area in the southwestern portion of the project site, and the flatter development site located nearer to Mitchell Canyon Road. Only approximately 50 percent of the site would be developed as part of the proposed project, while the remaining 50 percent of the project site would be preserved as open space in perpetuity and not affected by construction or future operations of the proposed project. The area to be retained as open space is the portion of the project site that currently provides the greatest visual quality offered on the project site. Therefore, implementation of the proposed project would only change the existing visual setting of the development site from undeveloped to a single-family residential subdivision. The following discussion provides an analysis of the changes in visual character and quality, as viewed from public areas in the project vicinity, that would be expected to occur as a result of the proposed project.

Distinguishing between public and private views is important, because private views are views seen from privately-owned land and are typically associated with individual viewers, including views from private residences. Public views are experienced by the collective public, and include views of significant landscape features and along scenic roads. According to CEQA (Pub. Resources Code, § 21000 et seq.) case law, only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720, the court determined that “we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188: “[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.” Therefore, the focus in this section is on potential impacts to public views.

Public views in the project vicinity would consist primarily of views of the development site seen by motorists, bicyclists, and pedestrians traveling on Mitchell Canyon Road. Public views looking east to west from this vantage point do not include prominent background features that would be obscured by the proposed project. The proposed project would convert a portion of the undeveloped project site to a residential use, and, thus, would alter the existing visual character of the site. However, all proposed residences would be single-story and the project would be consistent with the type, location, and intensity of the residential development that has been anticipated in the City of Clayton General Plan. The proposed project would also be considered an infill project by filling in a currently vacant parcel within the surrounding residential community with 18 single-family residences and three ADUs. Furthermore, the project includes landscaping within the project frontage located along Mitchell Canyon Road, such as cobble-stone pathways and native shrubs and grasses that would be bordered by wood-grain, two-rail open fencing. Landscaping improvements would also be included within each residential lot in an effort to ensure the development would be consistent with the visual aesthetic of landscaped areas along other adjacent portions of Mitchell Canyon Road. For example, one 15-gallon accent tree would be included in the front yards of the proposed residences, in addition to flowering shrubs and drought tolerant groundcover.

All development occurring on the project site would be subject to Site Plan Review consistent with Chapter 17.44 of the Clayton Municipal Code. The Site Plan Review process would include a review of the exterior appearance of all proposed facilities and structures to ensure compliance with the City's established General Plan policies. Importantly, the proposed residences would incorporate design features intended to reflect the rural character of surrounding development, including, but not limited to, single-story development not more than 27 feet in height, wood-grain two-rail open fencing, and the preservation of on-site open space area and the existing drainage channel.

Given the fact that: 1) the General Plan anticipated medium density residential development for the project site, generally consistent with what is being proposed, 2) the project includes the preservation of the existing drainage channel and hilly portions of the project site as open space, and 3) the project will adhere to the Site Plan Review requirements and other applicable policies set forth in the Clayton Municipal Code, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings, and a *less-than-significant* impact would occur.

- d. **Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? .....Less-Than-Significant Impact**

Discussion (d.)

The project site is currently undeveloped. As such, buildout of the development area with 18 single-family residences, three ADUs, an internal street, and various other associated improvements would introduce new sources of light and/or glare to portions of the site where none currently exist. Potential sources of nighttime light would include, but not be



limited to, lighting spilling from the interiors of the proposed residences, exterior light fixtures, street lighting on the new on-site roadway, and headlights from vehicles. Sources of glare could include windows on the proposed residential structures, as well as any other reflective surfaces.

The nearest sensitive receptors, considered to be the existing residences in proximity to the site, are located less than 50 feet from the project site to the north, south, and east across Mitchell Canyon Road. The project would be required to comply with Section 8.09 of the City's Municipal Code, which prohibits the installation or maintenance of outdoor light fixtures that would cause an undue annoyance to persons on neighboring parcels in residential zoning districts. Compliance with Section 8.09 of the City's Municipal Code would be ensured during the Site Plan Review process mentioned previously. In addition, 15-foot rear setbacks and the proposed intervening landscaping would further reduce impacts related to new light sources and glare.

Based on the above, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and a *less-than-significant* impact would occur.

**2. AGRICULTURE RESOURCES.**

<b>Issues</b>	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i>				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

- a. **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use? ..... No Impact**
- b. **Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ..... No Impact**

Discussion (a. and b.)

According to the California Department of Conservation Important Farmland Finder, the proposed project site is classified as Grazing Land.<sup>2</sup> The site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and, thus, the project would not convert such lands to non-agricultural use. Conflicts with existing zoning for agricultural use or a Williamson Act contract would not occur. As such, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural uses and would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Thus, *no impact* would occur as a result of the proposed project.

<sup>2</sup> California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed July 2020.

c. **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**..... **No Impact**

d. **Result in the loss of forest land or conversion of forest land to non-forest use?** ..... **No Impact**

Discussion (c. and d.)

The project site is not considered forest land (as defined in Public Resources Code section 12220[g]) or timberland (as defined by Public Resources Code section 4526), and the site is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have *no impact* with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

e. **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?** ..... **No Impact**

Discussion (e.)

The project site is located within the City of Clayton, and is located near existing residential development. Agricultural activities do not currently occur on the site, nor do they occur in any areas adjacent to or near the project site. Therefore, constructing 18 new single-family residences, three ADUs, and associated improvements within the development area of the project site would not result in conflicts between existing agricultural activities and the proposed residential land uses, which could impair existing agricultural operations or lead to induced conversion of agricultural lands due to incompatible uses. Therefore, the proposed project would not involve other changes in the existing environment, due to their location or nature, that could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use and, thus, *no impact* would occur.

### 3. AIR QUALITY.

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

a. **Would the project conflict with or obstruct implementation of the applicable air quality plan? .....Less-Than-Significant Impact**

b. **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? .....Less-Than-Significant Impact**

Discussion (a. and b.)

The City of Clayton is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB area is currently designated as a nonattainment area for State and federal ozone, State and federal fine particulate matter 2.5 microns in diameter (PM<sub>2.5</sub>), and State respirable particulate matter 10 microns in diameter (PM<sub>10</sub>) ambient air quality standards (AAQS). The SFBAAB is designated attainment or unclassified for all other AAQS. It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (USEPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM<sub>2.5</sub> federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM<sub>2.5</sub> AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation. The USEPA has not yet approved a request for redesignation of the SFBAAB; therefore, the SFBAAB remains in nonattainment for 24-hour PM<sub>2.5</sub>.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).

The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the USEPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2017 Clean Air Plan, adopted on April 19, 2017. The 2017 Clean Air Plan was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM<sub>10</sub> standard is not required, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2017 Clean Air Plan. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures to be implemented in the region to attain the State and federal AAQS within the SFBAAB. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. For development projects, BAAQMD establishes significance thresholds for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>), as well as for PM<sub>10</sub> and PM<sub>2.5</sub>, expressed in pounds per day (lbs/day) and tons per year (tons/yr). The thresholds are listed in Table 1. Thus, by exceeding the BAAQMD's mass emission thresholds for construction and/or operational emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

<b>Pollutant</b>	<b>Construction</b>	<b>Operational</b>	
	<b>Average Daily Emissions (lbs/day)</b>	<b>Average Daily Emissions (lbs/day)</b>	<b>Maximum Annual Emissions (tons/year)</b>
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub> (exhaust)	82	82	15
PM <sub>2.5</sub> (exhaust)	54	54	10

*Source: BAAQMD, CEQA Guidelines, May 2017.*

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2016.3.2 - a Statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, vehicle mix, trip length, average speed, etc. Where project-specific information is available, such information is applied in the model. The proposed project's modeling assumed the following:

- The modeled land uses consist of:
  - 18 single-family residential units on 3.19 acres of land; and
  - 0.74-acre of paved roadway.
- Construction would begin in May of 2021 and occur over approximately one year;

- Demolition of the on-site shed would involve removal of approximately 350 sf of building material;
- A total of 3.93 acres of land would be disturbed during grading, and import or export of material would not be required;
- The trip generation rate was set to 9.52 trips/unit, based on the Institute of Transportation Engineers (ITE) 9<sup>th</sup> edition trip generation rate for Single Family Homes (210);
- Fireplaces would not be installed;
- The project would provide on-site pedestrian connectivity;
- The project site is located within 0.5-mile of an existing transit stop;
- Pursuant to BAAQMD requirements, low-VOC outdoor paints would be used for architectural coatings; and
- The project would comply with all applicable provisions of the 2019 California Building Code (CBC), including installation of efficient indoor water fixtures, and generation of 100 percent of electricity on-site from renewable sources.

The proposed project’s estimated emissions associated with construction and operations and the project’s contribution to cumulative air quality conditions are provided below. All CalEEMod results are included as Appendix A to this IS/MND. It should be noted that the three ADU’s proposed for Lots 14, 16, and 18 would be expected to have reduced trip rates compared to the proposed single-family units. Overall, the three ADUs would not result in emissions substantial enough to affect the conclusions presented below.

*Construction Emissions*

According to the CalEEMod results, the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 2. As shown in the table, the proposed project’s construction emissions would be below the applicable thresholds of significance for ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

<b>Pollutant</b>	<b>Proposed Project Emissions</b>	<b>Threshold of Significance</b>	<b>Exceeds Threshold?</b>
ROG	4.03	54	<b>NO</b>
NO <sub>x</sub>	40.54	54	<b>NO</b>
PM <sub>10</sub> (exhaust)	2.05	82	<b>NO</b>
PM <sub>10</sub> (fugitive)	18.21	None	<b>N/A</b>
PM <sub>2.5</sub> (exhaust)	1.88	54	<b>NO</b>
PM <sub>2.5</sub> (fugitive)	9.97	None	<b>N/A</b>

*Source: CalEEMod, August 2020 (see Appendix A)*

Although thresholds of significance for mass emissions of fugitive dust PM<sub>10</sub> and PM<sub>2.5</sub> have not been identified by BAAQMD, the proposed project’s estimated fugitive dust emissions have been included for informational purposes. All projects within the jurisdiction of the BAAQMD are required to implement all of the BAAQMD’s Basic Construction Mitigation Measures, which include the following:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The proposed project's implementation of the BAAQMD's Basic Construction Mitigation Measures would further minimize construction-related emissions.

Because the proposed project would be below the applicable thresholds of significance for construction emissions, project construction would not result in a significant air quality impact.

### *Operational Emissions*

According to the CalEEMod results, the proposed project would result in maximum unmitigated operational criteria air pollutant emissions as shown in Table 3. As shown in the table, the proposed project's operational emissions would be well below the applicable thresholds of significance.

<b>Table 3</b>					
<b>Unmitigated Maximum Operational Emissions</b>					
<b>Pollutant</b>	<b>Proposed Project Emissions</b>		<b>Threshold of Significance</b>		<b>Exceeds Threshold?</b>
	<b>lbs/day</b>	<b>tons/yr</b>	<b>lbs/day</b>	<b>tons/yr</b>	
ROG	1.08	0.19	54	10	<b>NO</b>
NO <sub>x</sub>	1.08	0.19	54	10	<b>NO</b>
PM <sub>10</sub> (exhaust)	0.03	0.00	82	15	<b>NO</b>
PM <sub>10</sub> (fugitive)	0.79	0.14	None	None	<b>N/A</b>
PM <sub>2.5</sub> (exhaust)	0.02	0.00	54	10	<b>NO</b>
PM <sub>2.5</sub> (fugitive)	0.21	0.04	None	None	<b>N/A</b>

*Source: CalEEMod, August 2020 (see Appendix A)*

Because the proposed project's operational emissions would be below the applicable thresholds of significance, the proposed project would be considered to result in a less-than-significant air quality impact during operations.

*Cumulative Emissions*

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 1 represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If a project exceeds the significance thresholds presented in Table 1, the proposed project's emissions would be cumulatively considerable, resulting in significant adverse cumulative air quality impacts to the region's existing air quality conditions. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be expected to result in a cumulatively considerable contribution to the region's existing air quality conditions.

*Conclusion*

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2017 Clean Air Plan. According to BAAQMD, if a project would not result in significant air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be considered to conflict with or obstruct implementation of regional air quality plans.

Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, impacts would be considered *less than significant*.

- c. **Would the project expose sensitive receptors to substantial pollutant concentrations? .....Less-Than-Significant Impact**

Discussion (c.)

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically



considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors to the site would be the single-family residences to the north and south of the project site, located approximately 50 feet away in each direction.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and TAC emissions. Discussions of CO emissions, TAC emissions, criteria pollutants and potential health impacts resulting from the emission of criteria pollutants are included below.

### *Localized CO Emissions*

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, the BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

According to the Contra Costa Transportation Authority (CCTA) Congestion Management Plan (CMP), any land development application generating less than 100 peak hour trips is not required to prepare a study of the development's traffic impacts on the CMP network as such projects are expected to have minimal impacts on the CMP network.<sup>3</sup> As discussed in further detail in Section 17, Transportation, of this IS/MND, the proposed project would result in an estimated 193 new daily vehicle trips, with 16 new AM and 20 new PM peak hour vehicle trips. Because the project is anticipated to only generate 36 total peak hour trips per day, the project would be well below the CCTA CMP threshold of 100 new peak hour trips, and would thus be considered consistent with the CCTA CMP.

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<sup>3</sup> Contra Costa Transportation Authority. *2019 Update of the Contra Costa Congestion Management Program* [page 72]. Adopted December 18, 2019.

As discussed above, the project is not expected to generate a significant increase in peak hour trips. According to recent traffic counts on Mitchell Canyon Road, conducted by the City Engineering Department, Mitchell Canyon Road experiences an average daily traffic level of approximately 2,432 vehicle trips. The proposed residences are anticipated to generate approximately 193 trips per day, which would contribute a nominal increase in local traffic levels, and would not increase traffic volumes at any intersection to more than 44,000 vehicles per hour. As such, the proposed project's increase of 36 total new peak hour trips would not increase traffic volumes at nearby intersections to more than the hourly traffic volumes set forth in the BAAQMD's localized CO screening criteria. Furthermore, intersections where vertical and/or horizontal mixing is limited are not located in the project vicinity.

Based on the above, per the BAAQMD's screening criteria for localized CO emissions, the proposed project would not be expected to result in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

#### *TAC Emissions*

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. The nearest sensitive receptors to the proposed project are single-family residences located approximately 50 feet to the north and the single-family residences located approximately 50 feet to the south of the project site.

The proposed residential project does not include any operations that would be considered a substantial source of TACs. Accordingly, operations of the proposed project would not expose sensitive receptors to excess concentrations of TACs.

Short-term, construction-related activities could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Specifically, as noted above, construction would occur over an approximately one-year period, with the most intense period of construction occurring during the site-preparation phase, which would take place over approximately five days. The exposure period typically analyzed in health risk assessments is 30 years or greater, which is substantially longer than the approximately one-year total construction period associated with the proposed project. In addition, all construction equipment and operation thereof would be regulated by the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. Project construction would also be

required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. In addition, per the City of Clayton Municipal Code Section 15.01.101, construction activities would be limited to daytime hours only, which would limit the duration during which emissions from on-site equipment would occur.

During construction, only portions of the project site would be disturbed at a time. Operation of construction equipment would occur on portions of the site intermittently throughout the course of a day over the overall construction period. Because construction equipment on-site would operate only intermittently and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. According to BAAQMD, research conducted by CARB indicates that DPM is highly dispersive in the atmosphere. Thus, any particular nearby sensitive receptor would be exposed to varying concentrations of DPM emissions throughout the construction period, and a single receptor would not consistently be subject to substantial DPM emissions. Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, sensitive receptors in the area would not be exposed to pollutants for a permanent or substantially extended period of time.

Considering the short-term nature of construction activities, the regulated and intermittent nature of the operation of construction equipment, and the highly dispersive nature of DPM, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. For the aforementioned reasons, project construction would not be expected to expose sensitive receptors to substantial pollutant concentrations.

#### *Criteria Pollutants*

The BAAQMD thresholds of significance were established with consideration given to the health-based air quality standards established by the NAAQS and CAAQS, and are designed to aid the district in achieving attainment of the NAAQS and CAAQS.<sup>4</sup> Although the BAAQMD's thresholds of significance are intended to aid achievement of the NAAQS and CAAQS for which the SFBAAB is in nonattainment, the thresholds of significance do not represent a level above which individual project-level emissions would directly result in public health impacts. Nevertheless, a project's compliance with BAAQMD's thresholds of significance provides an indication that criteria pollutants released as a result of project implementation would not inhibit attainment of the health-based regional NAAQS and CAAQS. Because project-related emissions would not exceed the BAAQMD's thresholds, and, thus, would not inhibit attainment of regional NAAQS and CAAQS, the criteria pollutants emitted during project implementation would not be anticipated to result in measurable health impacts to sensitive receptors. Accordingly, the proposed project would not expose sensitive receptors to excess concentrations of criteria pollutants.

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<sup>4</sup> Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2017.

*Conclusion*

Based on the above discussion, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO or TACs from construction or operation, nor would the proposed project result in measurable health impacts to sensitive receptors due to the release of criteria pollutants. Therefore, the proposed project would result in a *less-than-significant* impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

- d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? .....Less-Than-Significant Impact**

Discussion (d.)

Emissions such as those leading to odors have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections “a” through “c” above. Therefore, the following discussion focuses on emissions of odors and dust.

Pursuant to the BAAQMD CEQA Guidelines, odors are generally regarded as an annoyance rather than a health hazard.<sup>5</sup> Manifestations of a person’s reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an odor impact is dependent on several variables including: the nature of the odor source; the frequency of odor generation; the intensity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor.

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantification of significant odor impacts is relatively difficult. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses.

Construction activities often include diesel-fueled equipment and heavy-duty diesel trucks, which can create odors associated with diesel fumes, which could be found to be objectionable. However, as discussed above, construction activities would be temporary, and operation of construction equipment would be regulated and intermittent. Project construction would be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors. Accordingly, substantial objectionable odors would not occur during construction activities or affect a substantial number of people.

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<sup>5</sup> Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines* [pg. 7-1]. May 2017.

In addition, the BAAQMD rules and regulations would act to reduce construction-related dust, which would ensure that construction of the proposed project does not result in substantial emissions of dust. Following project construction, the project site would not include any exposed topsoil. Thus, project operations would not include any substantial sources of dust.

For the aforementioned reasons, construction and operation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people, and a *less-than-significant* impact would result.

**4. BIOLOGICAL RESOURCES.**

<b>Issues</b>	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<b>X</b>		<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<b>X</b>		<input type="checkbox"/>
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

- a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ..... Less-Than-Significant With Mitigation Incorporated**

Discussion (a.)

This section is based upon a Planning Survey Report (PSR) prepared for the project site by Moore Biological Consultants (MBC) in order to comply with and receive Permit coverage under the *Natural Community Conservation Plan and the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP)* (see Appendix B)<sup>6</sup>.

The following discussion describes the sensitive biological resources that have the potential to be present within the project site based on the PSR. Sensitive biological resources

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<sup>6</sup> Moore Biological Consultants. *Application Form and Planning Survey Report, Diablo Meadows*. July 2020.  
*Initial Study/Mitigated Negative Declaration (ENV-01-2020)* September 2020  
*Diablo Meadows Project* Page 41

include habitats and/or individual plant and animal species that have special recognition by federal, State, or local conservation agencies. For purposes of this analysis, special-status animal species are defined as animals protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively), or other regulations, and species that are considered rare by the scientific community. Special-status plant species are defined as plants that are protected under the CESA and FESA or listed as rare by California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). Special-status species include:

- Animals and plants listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 et seq.; 14 CCR §670.1 et seq.) or the FESA (50 CFR 17.11);
- Animals and plants that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- Animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;
- Animals that are designated as "species of special concern" by CDFW (2016);
- Animal species that are designated as "fully protected" under California (Fish and Game Code 3511, 4700, 5050, and 5515);
- Animal species that are designated as "covered" species under the ECCHCP/NCCP;
- Plants that are listed by CNPS Rare Plant Program as rank 1A – plants presumed extirpated in California and either rare or extinct elsewhere, 1B – plants rare, threatened or endangered in California or elsewhere, 2A – plants presumed extirpated in California but common elsewhere, 2B – plants rare, threatened or endangered in California by common elsewhere, 3 – plants about which more is needed and 4 – plants of limited distribution; and
- Plants that are listed by the ECCHCP/NCCP as "covered" or "no take" species.

In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal.

According to the PSR, the project site consists of approximately 8.07 acres of annual grassland cover, 0.19-acres of seasonal wetlands, 0.02-acre of streams, and 0.38-acres of urban land (see Figure 9). The western portion of the project site, generally referred to as the open space area in this IS/MND, consists of rolling hills vegetated with annual grassland. Dominant annual grassland species within the western open space portion of the project site include oats, ripgut brome, foxtail barley, California poppy, common bedstraw, cut leaved geranium, and vetch. A marginal seasonal wetland feature is also located in the western portion of the site, in a low valley at the base of two hillslopes (see Figure 9). Vegetation associated with the seasonal wetland includes perennial ryegrass, creeping wild rye, curly dock, a few other marginal hydrophytes, and various upland species, including black mustard and common bedstraw.

**Figure 9**  
**Project Site Landcover Map**





As shown in Figure 9, the southern end of the seasonal wetland abruptly transitions to a defined channel with notable bed and bank that is best described as an ephemeral stream. The channel is approximately three feet wide without any adjacent wetlands. A very weak ephemeral stream is also located within the open space area along the western edge of the project site, with a barely discernible Ordinary High-Water Mark (OHWM). The channel is approximately one to two feet wide without any adjacent wetlands.

The eastern “panhandle” of the site, referred to as the development area, is considered a highly disturbed flat terrace vegetated with annual grassland. Dominant grassland species in the development area include oats, ripgut brome, black mustard, yellow star-thistle, radish, rose clover, and filaree. Upon site reconnaissance, the annual grassland was determined to be highly disturbed by periodic mowing and/or disking for fire suppression and weed abatement. In addition, 103 trees, predominantly of the Valley Oak species, were observed within the project site.

It should be noted that an approximately 0.38-acre area in the northwestern portion of the project site is depicted as urbanized and previously developed. A historical aerial photograph from 1939 shows the project site as an orchard, with a structure present within the area mapped as urbanized. While evidence of a structure does not exist on-site, there is a notably straight row of walnuts within the area that MBC determined was likely an old fence line, and a depressional area in the nearby seasonal wetland appears to be remnants of a small constructed stock pond.

The project site is located within the boundaries of the ECCCHCP/NCCP, which is intended to provide an effective framework to protect natural resources in the County.<sup>7</sup> The project site is located within Zone 2 of the Fee Payment Zones designated in the ECCCHCP/NCCP. Per the Fee Payment Zones, the proposed project would be subject to payment of all applicable fees prior to construction of the project, as further discussed under question ‘f’.

Visual reconnaissance surveys of the project area were conducted by MBC in April 2020. During the field surveys, the biologist walked the entire project site in meandering transects to evaluate biological resource conditions at the site. In addition, a botanist performed three field surveys to assess potentially suitable habitat for special-status plants. The field surveys were floristic in nature with the goal of identifying species observed to the taxonomic level necessary to determine whether a species was a special-status species.

As part of the PSR, a total of 11 covered or no-take special-status plant species were identified through the literature review and database queries as having suitable land cover present within the project site. Upon site reconnaissance, covered or no-take plants were not observed or are not expected to occur on the project site. MBC determined that the annual grassland within the site is moderately to highly disturbed and does not provide potentially suitable habitat for any of the covered plants that occur in the more natural annual grasslands in the greater project vicinity. The seasonal wetland is also disturbed and provides very poor-quality habitat for covered plants that occur in similar environments.

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<sup>7</sup> East Contra Costa County Habitat Conservation Plan Association. *Final East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan*. <http://www.co.contra-costa.ca.us/depart/cd/water/HCP/>. As updated October 2007

While the project site contains an ephemeral stream and grasslands, which may provide migration and aestivation habitat for California red-legged frog (CRLF), MBC determined that the stream would be considered too small and/or weak to provide suitable habitat for CRLF; similarly, the annual grasslands do not provide suitable aestivating habitat for CRLF due to periodic disking. MBC also determined that the seasonal wetland, which has been moderately disturbed by periodic mowing and past cultivation for orchard crops, does not provide suitable habitat for California tiger salamander (CTS) or vernal pool branchiopods (VPB). The project site is mapped in Appendix D of the ECCCHCP/NCCP as “potential movement habitat” for Alameda whipsnake; however, the site does not contain the mosaic of scrub, chaparral, grassland, and woodland habitat required by the species. In addition, while the stream along the western edge of the site is mapped in the ECCCHCP/NCCP as “potential movement habitat” for western pond turtle and “suitable low use habitat” for foothill yellow-legged frog, according to MBC, the hydrological regime of the on-site stream makes the stream unlikely to be used by either species.

However, MBC concluded that the project site contains suitable habitat for burrowing, foraging, and/or nesting activities for the San Joaquin kit fox, western burrowing owl, and golden eagle, as well as white-tailed kite, which is considered a fully protected species per California Fish and Game Code Section 3511. In addition, development of the site could result in significant adverse impacts to birds protected under the MBTA. Such species are discussed in further detail below.

### *Special-Status Wildlife*

The following discussions summarize the potential for the proposed project to result in adverse effects to San Joaquin kit fox, western burrowing owl, golden eagle, white-tailed kite, and birds protected by the MBTA.

#### San Joaquin Kit Fox

San Joaquin kit fox habitat is largely restricted to annual grassland. Within Contra Costa County, kit foxes primarily occur in the Los Vaqueros Watershed and Black Diamond Mines Regional Preserve, and are assumed to regularly move through and forage within the lands in between. The project site consists of annual grassland and ruderal grassland that is within the historical range of San Joaquin kit fox. However, the CNDDDB contains no occurrences of San Joaquin kit fox within 0.5-mile of the site.

The site is within ECCCHCP/NCCP-modeled range for San Joaquin kit fox and is identified as “suitable core habitat” in Appendix D of the ECCCHCP/NCCP. Therefore, the on-site grasslands were inspected for burrows or dens with evidence of kit fox occupancy (i.e. scat, tracks) or burrows or dens that meet the dimensional criteria for kit fox. Comprehensive inspection of potential den habitat was accomplished by walking meandering transects throughout the property, but did not uncover any potential San Joaquin kit fox dens. Nevertheless, because the project site is within modeled habitat for San Joaquin kit fox, preconstruction surveys would be required to ensure that the proposed development would not result in impacts to the species.

### Western Burrowing Owl

The western burrowing owl is designated by CDFW as a Species of Special Concern. Burrowing owls are found in open arid and semiarid habitats with short or sparse vegetation, including grasslands, deserts, agricultural fields, ruderal areas and open, landscaped areas. The species is dependent on mammals such as the California ground squirrel that dig underground burrows, which the owls occupy. Some burrowing owls have adapted to urban landscapes, and in some instances, open lots, roadsides, and landscaped areas can provide suitable habitat. Breeding typically occurs from March to August but can begin as early as February and can last into December.

The site consists of annual grassland and ruderal grassland that is within the range of western burrowing owl. CDFW's CNDDDB does not contain occurrences of western burrowing owl within 0.5-mile of the site. The site was inspected for burrowing owls and ground squirrel burrows with evidence of burrowing owl occupancy (i.e., white wash, pellets, feathers). Western burrowing owls or burrows with evidence of the species were not observed upon site reconnaissance. Nevertheless, because the project site is within modeled habitat for western burrowing owl, preconstruction surveys would be required to ensure that the proposed development would not result in impacts to the species.

### Golden Eagle

The site consists of annual grassland and ruderal grassland that is within the range of golden eagle habitat. CDFW's CNDDDB does not contain occurrences of golden eagle within 0.5-mile of the site. MBC determined that only a few of the on-site trees are large enough to support golden eagle. Potential nest trees near and visible from the site also contain potentially suitable habitat for nesting. Raptor stick nests were not observed within the on-site trees or off-site trees visible from the site. Golden eagles were not observed on the project site, as the species primarily nests more often on cliffs in remote natural areas than in trees near urban areas. Nevertheless, because the project site is within ECCCHCP/NCCP-modeled habitat for golden eagle, preconstruction surveys would be required to ensure that the proposed development would not result in impacts to the species.

### White-tailed kite

Potential nesting habitat for the white-tailed kite, a species identified by California Fish and Game Code 3511 as a fully protected species, occurs within various existing trees on the project site. Given that the project site includes suitable nesting habitat for the white-tailed kite, development of the site and removal of potential nesting trees could result in a significant adverse impact to white-tailed kite.

### Birds Protected by the MBTA

Several trees present on the proposed project site could serve as nesting locations for common and sensitive passerine and raptor species protected under the MBTA. Site construction activities, including tree removal during the active nesting season (February 1 to August 31) would have the potential to cause the failure or abandonment of active nests of migratory birds. Impacts to nesting birds, their eggs, and/or young caused by implementation of the project would be regarded as a potentially significant impact.

### *Special-Status Plants*

The PSR indicates that surveys must be completed for special-status plants based on whether suitable land cover types are found on-site. Based on the suitable land cover types identified in the PSR, a total of 11 special-status plant species could occur on-site, and, thus, require surveys. The species include adobe navarretia (*Navarretia nigelliformis*, Covered species), alkali milkvetch (*Astragalus tener*, ECCCHCP/NCCP No-take species), big tarplant (*Blepharizonia plumose*, ECCCHCP/NCCP Covered species), Brewer's dwarf flax (*Hesperolinon breweri*, ECCCHCP/NCCP Covered species), Contra Costa goldfields (*Lasthenia conugens*, ECCCHCP/NCCP No-take species), diamond-petaled poppy (*Eschscholzia rhombipetala*, ECCCHCP/NCCP No-take species), large-flowered fiddleneck (*Amsinckia grandiflora*, ECCCHCP/NCCP No-take species), Mount Diablo buckwheat (*Eriogonum truncatum*, ECCCHCP/NCCP No-take species), Mount Diablo fairy-lantern (*Calochortus Pulchellus*, ECCCHCP/NCCP Covered species), round-leaved filaree (*California macrophylla*, ECCCHCP/NCCP Covered species), and showy madia (*Madia radiata*, ECCCHCP/NCCP Covered species).

Three floristic surveys were determined appropriate to encompass the blooming periods of target species and were conducted on April 9<sup>th</sup>, April 29<sup>th</sup>, and July 14<sup>th</sup> of 2020. Special-status plants were not observed during the surveys. Therefore, impacts related to the potential disturbance of special-status plant species would be considered less-than-significant.

### *Conclusion*

Based on the above, in the absence of appropriate mitigation, construction activities associated with the proposed project could result in adverse effects to San Joaquin kit fox, western burrowing owl, golden eagle, white-tailed kite, and birds protected by the MBTA. Thus, a ***potentially significant*** impact could occur.

### Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impacts to a *less-than-significant* level.

***Mitigation Measure 1.***      *The project applicant shall be subject to pay all required fees associated with development in Zone 2 of the ECCCHCP/NCCP prior to the start of construction at the current fee rate in place at that time.*

### *San Joaquin Kit Fox*

***Mitigation Measure 2.***      *Preconstruction Survey. Prior to any ground disturbance related to covered activities, a USFWS/CDFW-approved biologist shall conduct a preconstruction survey in areas identified in the planning surveys as supporting suitable breeding or denning habitat for San Joaquin kit fox. The surveys shall establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by*

*kit foxes in accordance with USFWS survey guidelines (U.S Fish and Wildlife Service, 1999).*

*The preconstruction survey shall be conducted within 30 days of ground disturbance. On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership will not be surveyed. The status of all dens shall be determined and mapped. Written results of the preconstruction survey shall be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance. Concurrence is not required prior to initiation of covered activities.*

*Avoidance and Minimization Measures. If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the project applicant shall comply with the following avoidance and minimization requirements:*

- If a San Joaquin kit fox den is discovered within the proposed development footprint, the den shall be monitored for three days by a USFWS-CDFW-approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.*
- Unoccupied dens should be destroyed immediately to prevent subsequent use.*
- If a natal or pupping den is found, USFWS and CDFW shall be notified immediately. The den shall not be destroyed until the pups and adults have vacated and further consultation with USFWS and the CDFW has been performed.*
- If kit fox activity is observed at the den during the initial monitoring period, the den shall be monitored for an additional five consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied, the den may be excavated under the direction of the biologist. Alternatively, if the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgement of a biologist,*

*it is temporarily vacant (i.e., during the animal's normal foraging activities).*

- *If San Joaquin kit fox dens are identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances shall be demarcated. The configuration of exclusion zones shall be circular, with a radius measured outward from the den entrance(s). No covered activities shall occur within the exclusion zones. Exclusion zone radii for potential dens shall be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by the kit fox.*

### *Western Burrowing Owl*

#### **Mitigation Measure 3.**

*Preconstruction Survey. Prior to any ground disturbance related to covered activities, a USFWS/CDFW-approved biologist shall conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The survey shall establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995).*

*On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership shall not be surveyed. Surveys shall take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. Surveys shall take place no more than 30 days prior to construction. During the breeding season (February 1 to August 31), surveys shall document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1 to January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results shall be valid only for the season (breeding or nonbreeding) during which the survey is conducted.*

*Avoidance and Minimization Measures. If burrowing owls are found during the breeding season (February 1 to August 31), the project proponent shall avoid all nest sites that*

*could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance shall include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 to January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a buffer zone (described below).*

*During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur shall be established around each occupied burrow (nest site). Buffer zones of 160 feet shall be established around each burrow being used during the nonbreeding season. The buffers shall be delineated by highly visible, temporary construction fencing.*

*If occupied burrows for burrowing owls are not avoided, passive relocation shall be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.*

#### *Golden Eagle*

#### **Mitigation Measure 4.**

*Prior to implementation of covered activities, a qualified biologist shall conduct a preconstruction survey to establish whether nests of golden eagles are occupied. If nests are occupied, minimization requirements and construction monitoring shall be required.*

*Covered activities shall be prohibited within 0.5-mile of active nests. Nests can be built and active at almost any time of the year, although mating and egg incubation occurs late January through August, with peak activity in March through July. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation,*

limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the Implementing Entity shall coordinate with CDFW/USFWS to determine the appropriate buffer size.

Construction monitoring shall focus on ensuring that no covered activities occur within the buffer zone established around an active nest. Although no known golden eagle nest sites occur within or near the Urban Limit Line, covered activities inside and outside of the Preserve System have the potential to disturb golden eagle nest sites. Construction monitoring shall ensure that direct effects to golden eagles are minimized.

*White-tailed Kite*

**Mitigation Measure 5.** *Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15-August 31), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether white-tailed kite is nesting in trees in or visible from the site. The findings of the survey shall be submitted to the Community Development Department. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.*

*Birds Protected by the MBTA*

**Mitigation Measure 6.** *If work is scheduled to take place between February 1 and August 31, a pre-construction nesting bird survey shall be conducted by a qualified biologist within 14 days of construction. The findings of the survey shall be submitted to the Community Development Department. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.*

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? .....  
..... Less-Than-Significant With Mitigation Incorporated**
  
- c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal,**



**filling, hydrological interruption, or other means?**.....

..... **Less-Than-Significant With Mitigation Incorporated**

Discussion (b. and c.)

Riparian habitats are described as the land and vegetation that is situated along the bank of a stream or river. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Vernal pools are seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. Vernal pools range in size from small puddles to shallow lakes, and are usually found in gently sloping plains of grasslands.

As shown in Figure 10, an intermittent 0.01-acre blue-line stream traverses the western edge of the project site. Upon site reconnaissance, MBC determined that the stream is a very weak ephemeral stream with a barely discernable OHWM. The channel is approximately one to two feet wide with no adjacent wetlands. A marginal seasonal wetland feature is located to the east of the blue-line stream, located in a low valley between two notable hillslopes. Vegetation associated with the seasonal wetland includes perennial ryegrass, creeping wild rye, curly dock, a few other marginal hydrophytes, and some upland species including black mustard and common bedstraw. The southern end of the seasonal wetland abruptly transitions to a defined channel with a notable bed and bank that would also be considered a 0.01-acre ephemeral stream. The channel is approximately three feet wide with no adjacent wetlands. MBC did not identify any riparian vegetation or habitat associated with the foregoing features.

MBC conducted a wetland delineation of the project on April 3, 2020 and April 29, 2020. A total of approximately 0.21-acres of wetlands have been delineated on-site. The delineated features include the approximately 0.19-acre seasonal wetland and 0.02-acre of ephemeral streams. The water features are respectively labeled SW-1, ES-1, and ES-2 on the Wetland Delineation Map included as part of the PSR (see Figure 10).

The proposed project includes mitigation measures to ensure that the proposed project would fully avoid development on or near the wetland features, such as the proposed implementation of 25-foot setbacks between such water features and the limits of grading. Furthermore, as mentioned previously, the wetland features would be excluded from the development area and preserved in perpetuity as part of the open space area. Nonetheless, the potential exists for construction and operations within the development area to have a **potentially significant** impact regarding riparian habitat, seasonal wetlands, or vernal pools as defined by Section 404 of the Clean Water Act, or regarding a substantial adverse effect on a riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

**Figure 10  
Wetland Delineation**



Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

**Mitigation Measure 7.**

*The proposed project shall be designed in compliance with stream setback requirements set forth in Conservation Measures 1.7 and 2.12 of the ECCCHCP/NCCP, including the following avoidance and minimization measures:*

- *All wetlands to be avoided by covered activities shall be temporarily staked in the field by a qualified biologist, and a 25-foot buffer zone shall be implemented along the seasonal wetland swale and between the ephemeral streams and development activities.*
- *Herbicides shall not be applied within the buffer area around ephemeral streams or the seasonal wetland swale unless needed to control serious invasive plants. In such a case, herbicides that have been approved by the EPA for use in or adjacent to aquatic habitats may be used as long as label instructions are followed and applications avoid or minimize impacts on covered species and their habitats. Appropriate herbicides shall be applied to the ruderal grassland within the buffer area during the dry season to control non-native invasive species such as yellow star-thistle. Herbicide drift shall be minimized by applying the herbicide as close to the target area as possible.*
- *Personnel conducting ground-disturbing activities within or adjacent to the buffer zone of the ephemeral streams or the seasonal wetland swale shall be trained by a qualified biologist in the avoidance and minimization measures set forth by this IS/MND and the permit obligations of the project proponents working under the ECCCHCP.*

**Mitigation Measure 8.**

*Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. No construction or maintenance vehicles shall be refueled within 200 feet of ephemeral streams or the seasonal wetland swale unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill. In addition, trash generated during project construction shall be promptly removed from the site.*

**Mitigation Measure 9.**

*The proposed project shall be implemented in compliance with the hydrologic maintenance and erosion minimization measures set forth in Conservation Measures 1.10 and 2.12 of the ECCCHCP/NCCP. Standard construction best*

*management practices (BMPs) shall be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs shall include the use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences, or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydromulch.*

*Appropriate erosion-control measures (e.g. fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into the ephemeral streams or the seasonal wetland swale. Filter fences and mesh shall be of material that shall not entrap reptiles or amphibians. Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians. Fiber rolls used for erosion control shall be certified as free of noxious weed seed. Seed mixtures applied for erosion control shall not contain invasive non-native species, and shall be composed of native species or sterile non-native species.*

- d. Would the project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?.....Less-Than-Significant Impact**

Discussion (d.)

The proposed project site is bordered by Mitchell Canyon Road to the east and is surrounded by single-family residential development on the site's northern and western borders. A CEMEX quarry plant is located adjacent to the vacant land that borders the project site to the south. Such uses act as impediments to wildlife movement, and the project site does not provide connections to any nearby areas of high quality habitat. Although the ECCCHCP/NCCP mapped the project site as within a region of potential movement habitat for the Alameda whipsnake and western pond turtle, upon site reconnaissance, MBC determined that the project site does not contain the mosaic of scrub, chaparral, grassland, or woodland habitat required by the Alameda whipsnake, nor does the project site maintain a hydrological regime capable of supporting western pond turtle. The limited on-site habitat reduces the likelihood that the project site would be used for movement of the Alameda whipsnake or western pond turtle. Although the site could be used for scattered nesting of various raptor species, the site is not known to act as a substantial wildlife nursery site. Furthermore, the open space area of the site would continue to provide habitat for nesting species with implementation of the project. As such, the proposed project would not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Therefore, a *less-than-significant* impact would occur.

- e. **Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**.....  
 ..... **Less-Than-Significant With Mitigation Incorporated**

Discussion (e.)

The proposed project would be required to comply with all relevant policies and ordinances of the City of Clayton, including the Tree Protection Ordinance (Chapter 15.70 of the Municipal Code). The Tree Protection Ordinance calls for the protection of certain species of trees, and a Tree Removal Permit is required when removal of any tree with a trunk diameter of six inches or greater is proposed. An Arborist Report was prepared by Trees, Bugs, Dirt Landscaping Consulting and Training for the project site to inventory all on-site trees and make recommendations regarding tree preservation and removal based on tree health, structural condition, and location.<sup>8</sup> The Arborist Report evaluated a total of 58 trees, which included 36 trees with trunks located on-site, 18 trees located on adjacent properties bordering the project site, and four trees with trunks embedded along various fences surrounding the project site. A total of 37 trees are slated for removal. Thirty-four of the 37 trees proposed for removal are protected pursuant to the City’s Tree Preservation Ordinance. It should be noted that approximately 26 of the 34 protected trees were determined to have various indicators of poor health and would be recommended for removal regardless of ground-disturbing activities associated with the proposed project.

A large blue oak tree (Tree #37 per the Arborist Report) would be preserved within the development area as part of Lot 7 (see Figure 11).

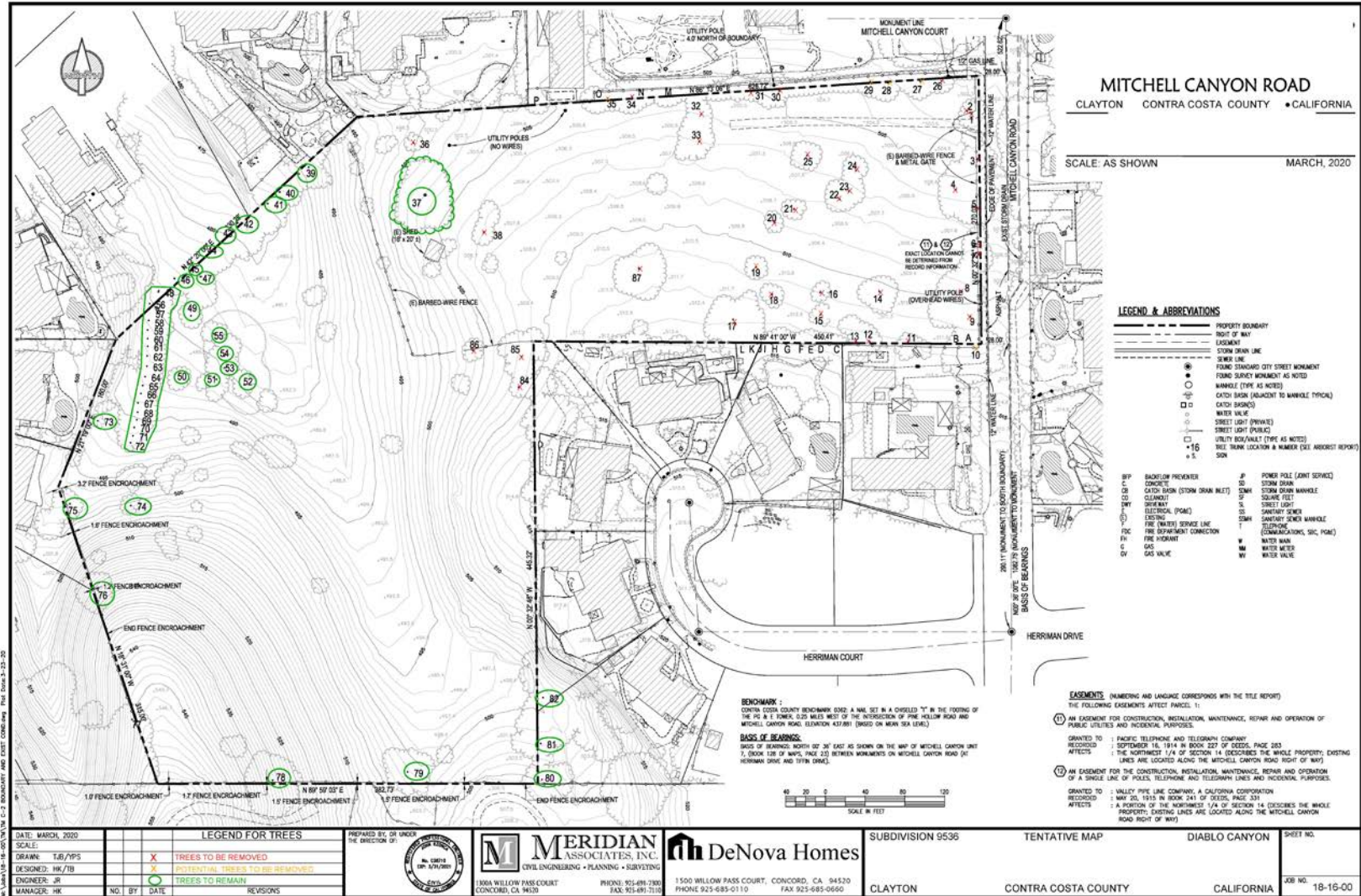
The planting of replacement trees or payment of an in-lieu fee is required for trees designated as protected trees per Chapter 15.70 of the City’s Municipal Code. As noted above, 26 of the protected trees proposed to be removed are in poor health and would be recommended for removal in any case. The other 8 protected trees proposed for removal are considered to be in good or excellent health. The cumulative tree diameter of those healthy trees is 152 inches. The City’s Municipal Code Section 15.70.035 allows for discretion regarding the requirement for a tree replacement plan. Section 15.70.040 indicates that replacement may be determined based upon 50% of the cumulative trunk diameter of the removed trees (i.e. 76 inches), or 33% of the cumulative trunk diameter of the removed trees (i.e. approximately 50 inches) if the replacement trees are of a variety listed in Section 15.70.015 C. Additionally, Section 15.070 allows the payment of an in-lieu fee if it is determined that the limitations of the site cannot accommodate the entirety of the tree replacement.

The arborist report includes recommendations to protect preserved trees during construction. Without implementation of protection measures, the proposed project could conflict with policies protecting biological resources, and could result in a *potentially significant* impact.

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<sup>8</sup> Trees, Bugs, Dirt Landscape Consulting and Training. *Arborist Report: Diablo Canyon, Mitchell Canyon Road, Clayton, CA.* April 30<sup>th</sup>, 2020.

Figure 11  
Tree Exhibit



Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

**Mitigation Measure 10.** *The following tree protection measures for tree to remain shall be implemented pursuant to the recommendations listed in the Arborist Report, to the extent feasible:*

- *The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to identify the location of the existing trees to be retained, as identified in the Arborist Report;*
- *A five-foot tree protection zone shall be established from the northern and southern fence lines extending into the development area where no foot, vehicle, storage, or any other intrusion shall be allowed during all construction phases. Prior to installation of new landscaping and fencing along property lines, protected trees on property lines shall not be disturbed within the tree protection zone;*
- *Landscaping around the protected oak (Tree #37) on-site shall be limited to mowing weeds, installing a layer of cardboard, and maintaining two inches of wood chip mulch on the soil surface;*
- *Installation of fences along the northern and southern borders shall adhere to tree protection measures to the greatest extent possible and avoid grading or digging within five radial feet of all protected tree trunks;*
- *New trees shall be selected, installed, and maintained as per requirements of the City of Clayton; and*
- *If a new fence line is established for the property, rather than demolishing and reinstalling the existing fence line, four border trees shall be preserved if feasible.*

**Mitigation Measure 11.** *Prior to the initiation of ground-disturbing activities, the potential for root damage shall be minimized through compliance with the following recommendations listed in the arborist report:*

- *Air spading around trees to be retained shall be performed along property lines within the northern and southern portions of the project site;*
- *All exposed roots shall be pruned using sharp sawzall blades;*
- *Pruned roots shall be covered with soil.*

**Mitigation Measure 12.** *Prior to the initiation of ground-disturbing activities, the potential for crown damage shall be minimized through compliance with the following recommendations listed in the arborist report:*

- *Crowns shall be raised as specified to allow for vehicle and equipment clearance:*
  - *Crowns shall be raised 16 feet above the existing grade;*
  - *50 percent of live crown ratio shall be maintained;*
  - *Thinning cuts shall be made two inches in diameter or smaller;*
  - *Downward growing branches from zero to 15 feet above grade shall be removed;*
  - *Branches larger than two inches in diameter shall be shortened by heading the branches back to at least half of their diameters; and*
  - *No more than 25 percent of a crown is to be removed in one season.*

**Mitigation Measure 13.** *A tree replacement plan for the removal of 152 inches of cumulative trunk diameter of protected tree species shall be prepared in accordance with Municipal Code Section 15.070.040 A1.or A.2., or, subject to determination by the Community Development Director or Planning Commission, the applicant must pay an in-lieu fee to the City for the purchase and installation of trees of equivalent value.*

**f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan? ..... Less-Than-Significant-Impact**

Discussion (f.)

The ECCCHCP/NCCP was prepared in 2007 and the City of Clayton became a signatory in January 2008. The ECCCHCP/NCCP is intended to provide a coordinated, regional approach to special-status species conservation and development regulation. A total of 28 species are covered under the ECCCHCP/NCCP. The ECCCHCP/NCCP provides streamlined permits from the USFWS and CDFW for covered species for new urban development projects and a variety of public infrastructure projects. Development fees within the ECCCHCP/NCCP area are assessed based on fee zones and land cover types.

A PSR has been prepared for the proposed project in order to comply with and receive permit coverage under the ECCHCP/NCCP. Per the PSR, the project site is located within Development Fee Zone 2. As noted previously, the site comprises three field-verified land cover types: 8.07 acres of annual grassland, 0.19 acres of seasonal wetland, and 0.02 acres of aquatic stream. As required by Mitigation Measure 1, the proposed project would be



subject to pay all applicable fees according to the Fee Zone Map of the ECCCHCP/NCCP prior to construction. Therefore, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, and a *less-than-significant* impact would result from the proposed project.

**5. CULTURAL RESOURCES.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
c.	Disturb any human remains, including those interred outside of dedicated cemeteries.	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

- a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? .....Less-Than-Significant**

Discussion (a.)

The project site is primarily undeveloped, with the exception of an existing shed on-site that has not been identified as a historic resource. The site is not included in the Historical Sites listed in the City of Clayton General Plan or indicated in Exhibit V-3 of the General Plan Community Design Element. As such, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; and a *less-than-significant* impact would occur.

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? ... Less-Than-Significant With Mitigation Incorporated**

- c. Disturb any human remains, including those interred outside of dedicated cemeteries? Less-Than-Significant With Mitigation Incorporated**

Discussion (b. and c.)

An archaeological resources review was conducted by Basin Research Associates (BASIN) for the project site.<sup>9</sup> The review included the results of records searches, a review of pertinent literature, and a request to the Native American Heritage Commission (NAHC) for a review of the Sacred Lands Inventory. In addition, a prehistoric and historic site record and literature search was conducted by the California Historical Resources Information System (CHRIS) Northwest Information Center at California State University for a 0.25-mile radius around the project site. A field review of the parcels was not undertaken.

The Contra Costa General Plan Archaeological Sensitivity Map shows the proposed project and vicinity as “largely urbanized areas and publicly owned lands excluded from [the] archaeological sensitivity survey.”<sup>10</sup> The project site is located in proximity to nearby

<sup>9</sup> BASIN Research Associates. *Archaeological Resources Review – Mitchell Canyon Road Development, Clayton, Contra Costa County, California*. August 9, 2019.

<sup>10</sup> Contra Costa County. *General Plan, Open Space Element, Figure 9-2: Archaeological Sensitivity Map*. [pg. 9-11] January 18, 2005.

Mitchell Creek, located east of Mitchell Canyon Road. Water courses and springs were often focus points for Native American activity in the region. While the project site is located in proximity to a water source, resource procurement sites for food, raw materials, and/or prominent topographic features that would indicate historical Native American activity have not been recorded within the project site or in the project vicinity. CHRIS records search results indicated that neither recorded prehistoric and historic area cultural resources nor any known ethnographic, traditional, or contemporary Native American use areas and/or features of cultural significance exist within, adjacent to, or within 0.25-mile of the project site. Furthermore, a Sacred Lands File search conducted by the NAHC in 2019 returned negative results for Native American tribal resources on-site. Because cultural and/or archeological resources were not identified by the literature review, BASIN determined the likelihood of discovering such artifacts, in addition to significant subsurface cultural materials, would be low.

Although the likelihood of disturbing prehistoric and historic era cultural resources is low, unknown archaeological resources, including human remains, have the potential to be uncovered during ground-disturbing construction and excavation activities at the project site. If previously unknown resources are encountered during construction activities, the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of dedicated cemeteries. Therefore, the proposed project could result in a *potentially significant* impact to such resources.

#### Mitigation Measure(s)

The following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

**Mitigation Measure 14.** *Prior to the issuance of a grading permit, the grading plan shall include a requirement (via notation) indicating that if cultural resources, or human remains are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City, at the expense of the project applicant, shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken.*

**Mitigation Measure 15.** *Pursuant to State Health and Safety Code §7050.5(c) and State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop within 100 feet of the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native*

*American, the Coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the Most Likely Descendant (MLD). The MLD shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work shall not take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist at the applicant's expense, until the preceding actions have been implemented.*

**6. ENERGY**

<b>Issues</b>	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

- a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? .....Less-Than-Significant**
- b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? .....Less-Than-Significant**

Discussion (a. and b.)

The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code (CAL Green Code) and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project’s potential effects related to energy demand during construction and operations are provided below.

*California Green Building Standards Code*

The 2019 CAL Green Code is a portion of the CBC, otherwise known as the CAL Green Code (CCR Title 24, Part 11), which became effective on January 1, 2020.<sup>11</sup> The purpose of the CAL Green Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CAL Green Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources’ Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;

<sup>11</sup> California Building Standards Commission. *California Green Building Standards Code*. 2019.

- Diversion of 65 percent of construction and demolition waste from landfills; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.
- For some single-family and low-rise residential development developed after January 1, 2020, mandatory on-site solar energy systems capable of producing 100 percent of the electricity demand created by the residence(s). Certain residential developments, including those developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement.

### *Building Energy Efficiency Standards*

The 2019 Building Energy Efficiency Standards is a portion of the CBC, which expands upon energy efficiency measures from the 2016 Building Energy Efficiency Standards. The 2019 Building Energy Efficiency Standards are in effect for building permit applications submitted after January 1, 2020. The 2019 standards provide for additional efficiency improvements beyond the 2016 standards. Non-residential buildings built in compliance with the 2019 standards are anticipated to use approximately 30 percent less energy compared to the 2016 standards, primarily due to lighting upgrades. For residential buildings, compliance with the 2019 standards will use approximately seven percent less energy due to energy efficiency measures compared to homes built under the 2016 standards. One of the improvements included within the 2019 Building Energy Efficiency Standards is the requirement that certain residential developments, including some single-family and low-rise residential developments, include on-site solar energy systems capable of producing 100 percent of the electricity demanded by the residences. Certain residential developments, including developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement; however, such developments are subject to all other applicable portions of the 2019 Building Energy Efficiency Standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use approximately 53 percent less energy than those under the 2016 standards.

### *Construction Energy Use*

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. Project construction is not anticipated to involve the use of natural gas appliances or equipment.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is

intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction.

The CARB prepared the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan),<sup>12</sup> which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The CARB In-Use Off-Road Diesel Vehicle Regulation described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

### *Operational Energy Use*

Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by the proposed residential development. The project would be required to include a solar photovoltaic system in accordance with Building Energy Efficiency Standards, which would reduce impacts on electricity and natural gas generated by the proposed project. All electrical and natural gas needs that could not be met by solar energy would be provided by PG&E.

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<sup>12</sup> California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.

The proposed residential project would be subject to all relevant provisions of the most recent update of the CBC, including the CAL Green Code and the Building Energy Efficiency Standards. Adherence to the most recent CAL Green Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Required compliance with the CBC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, California has set energy-use reduction goals targeting zero-net-energy use in all new homes by 2020. The CALGreen Code requires that new buildings use a combination of energy efficiency and distributed renewable energy generation to meet all annual energy needs. As such, the proposed residences would be constructed to incorporate renewable energy systems sufficient to meet 100 percent of the proposed residences' electricity demand. Required compliance with the CBC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, as discussed in Section 17, Transportation, of this IS/MND, the project area is currently provided transit service by the Central Contra Costa Transit Authority. The nearest bus stop relative to the project site is located at the Clayton Road/Mitchell Canyon Road intersection, approximately 0.5-mile north of the site. Transit would provide access to several grocery stores, restaurants, banks, and schools within close proximity to the project site. The site's access to public transit and proximity to such uses would reduce VMT and, consequently, fuel consumption associated with the proposed project, thereby providing for increased pedestrian connectivity with the surrounding area and resulting in reduced vehicle use.

#### *Conclusion*

Based on the context above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a *less-than-significant* impact would occur.



**7. GEOLOGY AND SOILS.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i.	Rupture of a known earthquake fault, as delineated on the most recent Alquist - Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
ii.	Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
iii.	Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
iv.	Landslides?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

**a-i. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist - Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? .....Less-Than-Significant Impact**

**a-ii. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?.....Less-Than-Significant Impact**

**a-iii. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction? .....Less-Than-Significant Impact**

Discussion (a-i., a-ii, aiii.)

A Geotechnical Investigation was prepared for the proposed project by Stevens, Ferrone, & Bailey Engineering Company, Inc. (see Appendix C).<sup>13</sup> According to the Geotechnical Report, the proposed project site is not located within an Alquist-Priolo Fault Zone; however, large earthquakes have historically occurred in the San Francisco Bay Area. The nearest active fault is the Greenville Fault, located approximately one mile east of the site. Other active faults in the region include the Concord, Calaveras, Cordelia, Green Valley, Hayward, and San Andreas faults. Given that none of the faults cross the project site, the potential for ground rupture is low.

An earthquake of moderate to high magnitude generated within the project region could cause considerable ground shaking at the site. Nonetheless, all structures proposed for the project would be designed in accordance with the requirements of the adopted edition of the CBC in place at the time of construction. Structures built according to the seismic design provisions of current building codes should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage but with some nonstructural damage; and 3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Consequently, as the proposed project would comply with all applicable CBC recommendations, the project would not be anticipated to result in the risk of loss, injury, or death due to structural collapse.

Liquefaction is a phenomenon in which saturated cohesionless soils are subject to a temporary loss of shear strength due to pore pressure build-up under the cyclic shear stresses associated with earthquakes. Soils that are most susceptible to liquefaction are lean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. Per the Geotechnical Investigation prepared for the project site, the site is located in an area that has been characterized as having very low to low liquefaction susceptibility based on the material types and densities of materials present on-site.

Therefore, the proposed project would not expose people or structures to substantial adverse effects including the risk of loss, injury, or death involving the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Map, strong seismic ground shaking, and liquefaction, resulting in a *less-than-significant* impact.

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<sup>13</sup> Stevens, Ferrone, & Bailey Engineering Company, Inc. *Geotechnical Investigation prepared for the Mitchell Canyon Development, Clayton, California, SFB Project No. 155-90*. February 28, 2020.

**a-iv. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related landslides? .....  
..... Less-Than-Significant Impact With Mitigation Incorporated**

**c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? .....  
..... Less-Than-Significant Impact With Mitigation Incorporated**

Discussion (a-iv. and c.)

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. Because the potential for liquefaction was determined to be low, the potential for lateral spreading to pose a risk to the proposed development is low. However, general site surface grades slope gently downwards toward the north, with slope inclinations intensifying at higher elevations within the open space area and flattening within the lower elevations of the development site. The edge of the development area near the drainage channel contains a sloping open face, which may experience downward and lateral movements that could cause ground surface movements, including potential movement of any adjacent improvements such as foundations, utilities, pavements, driveways, walkways, curbs, and gutters. To reduce the potential for damaging movements, the Geotechnical Investigation recommends that slopes be appropriately restrained using an engineered retaining system, such as deepened curbs and foundations that are designed to resist lateral earth pressures and act as a retaining wall.

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. According to the Geotechnical Report prepared for the proposed project, the topography of the development site slopes slightly toward the north but is generally flat. While the open space area contains steep slopes, the open space area would not be affected by grading or other construction-related activities. Furthermore, per the California Earthquake Hazards Zone Application, the project site is not located within a designated seismic hazard zone for landslides.<sup>14</sup> Thus, the proposed project would not be subject to substantial landslide risks.

Subsidence occurs when the earth's surface sinks due to settlement of soils during earthquake shaking, excessive groundwater extraction, and/or loose soil conditions. Groundwater extraction would not occur at the site; however, groundwater was encountered during a boring test near the drainage channel at a depth of about ten feet. During field explorations, layers of soft to stiff clays and silts with sand and gravel, as well as medium dense gravels, were encountered at depths of approximately four feet within the

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<sup>14</sup> California Department of Conservation. *California Earthquake Hazards Zone Application*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed August 2020.

northeast facing hillside in the open space area, and two feet in all other areas of the project site. The soft to firm soils that mantle the soil were determined to be weak and highly compressible. Therefore, on-site soils could experience measurable consolidation settlements. In order to minimize potential risks associated with compressible soils, the Geotechnical Report provides specific recommendations related to excavation standards.

Based on the above, if the recommendations within the Geotechnical Report related to compressible soils and lateral spread are not properly implemented during construction of the proposed project, the project could result in subsidence, and a **potentially significant** impact could occur as a result of the proposed project.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

**Mitigation Measure 16.** *Prior to approval of the improvement plans for the project, all recommendations from the Geotechnical Report prepared for the project by Stevens, Ferrone, & Bailey Engineering Company, Inc (2020) shall be incorporated into the improvement plans to the satisfaction of the City Engineer. In addition, the applicant shall retain a California Registered Geotechnical Engineer to perform field observations during grading. Compliance with the recommendations of the Geotechnical Engineer shall be provided to the City Engineer.*

**b. Would the project result in substantial soil erosion or the loss of topsoil? ... Less-Than-Significant With Mitigation Incorporated**

Discussion (b.)

Construction of the proposed project would involve grading of the development footprint, including sloped portions of the project site, to accommodate the proposed site improvements. After grading, but prior to the overlaying of the ground surface with structures, topsoil of the disturbed portions of the site would be exposed, and the earth surfaces would be susceptible to erosion from wind and water. During the grading and excavation phases of construction, appropriate measures consistent with the Clayton Stormwater Management Ordinance and other applicable regulations (e.g., State Regional Water Quality Control Board National Pollutant Discharge Elimination System regulations) would be required to be implemented in order to control erosion on the site and minimize the impacts related to loss of topsoil. See Section 10, Hydrology and Water Quality, of this IS/MND for further discussion regarding the relationship of erosion to water quality.

The proposed project could result in soil erosion or the loss of topsoil associated with grading and excavation of the project site during construction. Therefore, a **potentially significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

**Mitigation Measure 17.** *Prior to the issuance of a grading permit, the project applicant shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:*

- *Hydro-seeding;*
- *Placement of erosion control measures within drainage ways and ahead of drop inlets;*
- *The temporary lining (during construction activities) of drop inlets with “filter fabric”;*
- *The placement of straw wattles along slope contours;*
- *Use of a designated equipment and vehicle “wash-out” location;*
- *Use of siltation fences;*
- *Use of on-site rock/gravel road at construction access points; and*
- *Use of sediment basins and dust palliatives.*

**d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property? ..... Less-Than-Significant Impact**

Discussion (d.)

Expansive soils are subject to shrinking and swelling as a result of seasonal fluctuations in soil moisture content, potentially resulting in heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Per the Geotechnical Report, the on-site soils were indicated to have a high shrink-swell potential and moderate potential for expansion. However, building damage due to volume changes associated with expansive soils may be reduced through proper foundation design. In order to minimize potential risks associated with expansive soils, the Geotechnical Report provides specific recommendations related to foundation design. As noted above, under question ‘aiv’ and ‘c’, the project would be required to implement Mitigation Measure 16, which requires recommendations from the Geotechnical Report be incorporated into the project improvement plans. Implementation of Mitigation Measure 16 would ensure that the recommendations within the Geotechnical Report related to expansive soils are properly implemented during construction. Thus, the proposed project would not create substantial direct or indirect risks to life or property related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), and a *less-than-significant* impact would occur.

- e. **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ..... No Impact**

Discussion (e.)

The proposed residences would be connected to the City of Clayton’s sewer system and would not require the installation or use of septic tanks. Therefore, the proposed project would have *no impact* regarding having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems.

- f. **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ..... Less-Than-Significant Impact**

Discussion (f.)

The City’s General Plan does not note the existence of any unique geologic features or paleontological resources within the City. Consequently, implementation of the proposed project would not be anticipated to have the potential to result in direct or indirect destruction of unique geologic features.

In addition, the majority of the surrounding area is developed and paleontological resources are not known to have not been encountered in the vicinity. Thus, existing paleontological resources are not expected to occur on the site. Nonetheless, the potential exists for previously unknown paleontological resources to exist within the project site. Ground-disturbing activity such as grading, trenching, or excavating associated with implementation of the proposed project would have the potential to disturb or destroy such resources, if present. However, Mitigation Measures 14 and 15 require the appropriate actions be taken should any cultural resources, human remains, or bone of unknown origin be found within the project site during construction activities. With the implementation of Mitigation Measures 14 and 15, the proposed project would not result in the direct or indirect destruction of a unique paleontological resource, and a *less-than-significant* impact would occur.

## 8. GREENHOUSE GAS EMISSIONS

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

- a. **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?.....Less-Than-Significant Impact**
- b. **Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? .....Less-Than-Significant Impact**

### Discussion (a. and b.)

Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO<sub>2</sub>) and, to a lesser extent, other GHG pollutants, such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO<sub>2</sub> equivalents (MTCO<sub>2e</sub>/yr).

The proposed project is located within the jurisdictional boundaries of BAAQMD. The BAAQMD threshold of significance for project-level operational GHG emissions is 1,100 MTCO<sub>2e</sub>/yr or 4.6 MTCO<sub>2e</sub>/yr per service population (population + employees). BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. If a project would generate GHG emissions

above the threshold level, the project would be considered to generate significant GHG emissions and conflict with applicable GHG regulations.

The quantitative thresholds above were adopted by BAAQMD in order to demonstrate a project's compliance with statewide emissions reduction targets established by the state legislature in Assembly Bill 32. Since adoption of the BAAQMD's thresholds of significance, the state legislature has passed Senate Bill (SB) 32, which established further statewide emissions targets. BAAQMD has not yet adopted thresholds that may be used to determine a project's compliance with SB 32. In the absence of adopted GHG emissions thresholds to assess compliance with SB 32, the BAAQMD has directed jurisdictions to qualitatively assess a project's compliance with the recommended mitigation measures within the *California's 2017 Climate Change Scoping Plan (2017 Scoping Plan)* as an alternative means of assessing a project's potential impacts related to GHG emissions.<sup>15</sup>

The proposed project's GHG emissions were quantified with CalEEMod using the same assumptions as presented in Section 3, Air Quality, of this IS/MND, and compared to the thresholds of significance noted above. The proposed project's required compliance with the 2019 California Building Energy Efficiency Standards Code was assumed in the modeling. In addition, the CO<sub>2</sub> intensity factor within the model was adjusted to reflect the PG&E's anticipated CO<sub>2</sub> emissions factor for the year 2023. All CalEEMod results are included in Appendix A to this IS/MND.

#### *BAAQMD Thresholds*

Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, nor do they require quantification. Nonetheless, the proposed project's construction GHG emissions have been estimated. The CalEEMod emissions estimates prepared for the proposed project determined that unmitigated project construction would result in total emissions of 440.61 MTCO<sub>2e</sub> over the course of the construction period.

The estimated maximum annual GHG emissions related to operations of the proposed project are presented in Table 4 below. As shown in Table 4, the project's maximum annual unmitigated operation GHG emissions were estimated to be approximately 182.60 MTCO<sub>2e</sub>/yr. Thus, implementation of the proposed project would result in operational emissions well below the BAAQMD's applicable 1,100 MTCO<sub>2e</sub>/yr threshold of significance for GHG emissions. Even if the total construction emissions are added to the annual operations emissions, the sum would be 623.21 MTCO<sub>2e</sub>, which remains below the BAAQMD threshold of significance.

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<sup>15</sup> Flores, Areana. Environmental Planner, Planning and Climate Protection. Personal communication [phone] with Jacob Byrne, Senior Associate/Air Quality Technician, Raney Planning and Management, Inc. September 17, 2019.



<b>Table 4 Operational GHG Emissions</b>	
<b>Source</b>	<b>GHG Emissions (MTCO<sub>2</sub>e/yr)</b>
Area	0.22
Energy	26.33
Mobile	143.09
Waste	10.77
Water	2.18
<b>Total Annual Operational GHG Emissions</b>	<b>182.60</b>
<b>BAAQMD Threshold</b>	<b>1,100 MTCO<sub>2</sub>e/yr</b>
<b>Exceeds Threshold?</b>	<b>NO</b>
<i>Source: CalEEMod, August 2020 (see Appendix A).</i>	

*Consistency with 2017 Scoping Plan*

Appendix B to the CARB’s 2017 Scoping Plan provides examples of potentially feasible mitigation measures that could be considered to assess a project’s compliance with the State’s 2030 GHG emissions reductions goals. Thus, general compliance with the Local Actions within the 2017 Scoping Plan could be considered to demonstrate the project’s compliance with SB 32. The project’s consistency with the applicable Local Actions within the 2017 Scoping Plan is assessed in Table 5 below.

<b>Table 5 Project Consistency with the 2017 Scoping Plan</b>	
<b>Suggested Measure</b>	<b>Consistency Discussion</b>
<b>Construction</b>	
Enforce idling time restrictions for construction vehicles.	CARB’s In-Use Off-Road Vehicle Regulations include restrictions that limit idling time to five minutes under most situations. Construction fleets and all equipment operated as part of on-site construction activities would be subject to CARB’s idling restrictions. As such, the proposed project would be required to comply with this measure.
Require construction vehicles to operate with the highest tier engines commercially available.	The project applicant has not committed to using construction equipment that complies with the highest tier engines commercially available. However, it should be noted that construction emissions would fall below the BAAQMD’s thresholds. Nonetheless, project compliance with this measure is uncertain.
Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible.	The CALGreen Code requires the diversion of construction and demolition waste, and the proposed project would be required to comply with the requirements within the most up-to-date CALGreen Code. The project would not include any demolition activity. Thus, the project would be considered to comply with the suggested measure.
Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance.	Of the 58 existing on-site trees, 37 trees are recommended for removal as part of the proposed project. However, pursuant to Chapter 15.70.040, Tree Replacement Plan, of the City’s Municipal Code, the preliminary Landscaping Plan for the project site includes the provision of new trees as a means of

**Table 5  
Project Consistency with the 2017 Scoping Plan**

Suggested Measure	Consistency Discussion
	replacement. As such, the project would comply with the suggested measure.
Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators.	The contractor would use existing grid electricity to the extent feasible. However, the possibility exists that temporary generators will be used for electricity in instances where grid electricity is not accessible. Overall, the project would be considered to generally comply with the suggested measure.
Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available.	The project applicant has not committed to the use of alternatively fueled construction equipment. Furthermore, the commercial availability of renewable diesel in the project area is currently unknown. Consequently, compliance with this suggested measure is uncertain at this time.
Require diesel equipment fleets to be lower emitting than any current emission standard.	The project applicant has not committed to reducing emissions from the construction fleet beyond any current emissions standards. Consequently, compliance with this suggested measure is uncertain at this time.
Operations	
Comply with lead agency's standards for mitigating transportation impacts under SB 743.	As noted in Section 17, Transportation, of this IS/MND, the project would result in a less-than-significant impact related to VMT. Because buildout of the project would produce fewer residences than what was originally planned for the project site, project-generated VMT would be less than what was anticipated for the site by the General Plan. In addition, the project site's proximity to public transit would further reduce VMT. Thus, the project would be considered to comply with the suggested measure.
Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals.	Per the 2019 CALGreen Code, residential projects are required to install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each unit, which would be suitable for EV charging. Compliance with the 2019 CALGreen Code would ensure that the proposed project provides sufficient EV charging infrastructure to comply with this suggested measure.
Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan.	As part of the project, a new sidewalk would be provided along the project's Mitchell Canyon Road frontage and along the northern side of the internal street. In the vicinity of the project site, Mitchell Canyon Road provides a gravel pedestrian route. Development of the proposed sidewalk would increase connectivity to the nearby neighborhoods and public transit stops. The project would not include additions or changes to the existing bicycle infrastructure. Overall, the project would comply with the suggested measure. Additional discussion of bicycle, pedestrian, and transit facilities is provided in Section 17, Transportation, of this IS/MND.
Require on-site renewable energy generation.	The CBC requires that residential structures that are three-stories or less in height be constructed with

**Table 5  
Project Consistency with the 2017 Scoping Plan**

Suggested Measure	Consistency Discussion
	renewable energy systems sufficient to provide 100 percent of the electricity required for the residence. The proposed single-family residences would be subject to such requirements. Due to the CBC's requirements regarding renewable energy systems for residential land uses, the proposed project would include on-site renewable energy generation and would comply with this measure.
Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over a certain size development.	The proposed project would not include wood-burning fireplaces. Thus, the proposed project would comply with the suggested measure.
Require cool roofs and "cool parking" that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing.	The 2019 Building Energy Efficiency Standards contains requirements for the thermal emittance, three-year aged reflectance, and Solar Reflectance Index (SRI) of roofing materials used in new construction and re-roofing projects. Such standards, with which the project would be required to comply, would help to reduce heating and cooling costs associated with the proposed project. Therefore, the proposed project would generally comply with the suggested measure.
Require solar-ready roofs.	The CBC requires that new residential structures be built with rooftop solar. Therefore, the proposed project would exceed the requirements of this suggested measure.
Require organic collection in new developments.	Solid waste, recycling, and yard waste collection services are provided to the City of Clayton by Republic Services. Thus, future residents of the proposed project would have access to such organic collection services, and the project would generally comply with the suggested measure.
Require low-water landscaping in new developments (see CALGreen Divisions 4.3 and 5.3 and the Model Water Efficient Landscape Ordinance [MWELo], which is referenced in CALGreen). Require water efficient landscape maintenance to conserve water and reduce landscape waste.	Landscaping within the project site would be required to comply with the CALGreen Code and all water efficiency measures therein, including the MWELo or any similar regulations adopted by the City of Clayton. Accordingly, the proposed project is anticipated to comply with this measure.
Achieve Zero Net Energy performance building standards prior to dates required by the Energy Code.	Through CBC requirements, such as the requirement to include on-site solar electricity for all proposed residences, the proposed single-family residences are anticipated to achieve Zero Net electricity. Therefore, the proposed project is anticipated to achieve substantial compliance with this measure.
Encourage new construction, including municipal building construction, to achieve third-party green building certifications, such as	The project applicant has not committed to achieving any third-party green building certifications. Consequently, compliance with the suggested measure is uncertain at this time.

**Table 5  
Project Consistency with the 2017 Scoping Plan**

Suggested Measure	Consistency Discussion
the GreenPoint Rated program, LEED rating system, or Living Building Challenge.	
Expand urban forestry and green infrastructure in new land development.	The project would include landscaping throughout the site, and would include the planting and maintenance of several new trees, shrubs, and other plants. Therefore, the project would generally comply with the suggested measure.
Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment	Pursuant to California Electrical Code, Article 210.52(E), the project would be required to include at least one electrical outlet to be located in the perimeter of a balcony, desk, or porch. The project applicant has not committed to providing additional exterior electrical outlets to promote the use of electric landscape maintenance equipment. Consequently, the project would partially comply with the suggested measure.
Require the design of the electric outlets and/or wiring in new residential unit garages to promote electric vehicle usage.	The CBC requires that new residential unit garages be designed with wiring sufficient to provide future installation of electric vehicle charging infrastructure. Therefore, the proposed project would be required to comply with this measure.
Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans.	Title 20 and Title 24 of the California Code of Regulations require the use of energy efficient appliances and building systems. The proposed project would be required to comply with all applicable efficiency standards sets forth in Title 20 and Title 24 and, therefore, the project would substantially comply with the suggested measure.
Require each residential and commercial building equip buildings [sic] with energy efficient AC units and heating systems with programmable thermostats/timers.	As noted above, the proposed project would be required to comply with all energy efficiency standards set forth in Title 20 and Title 24 of the California Code of Regulations. As such, the project would generally comply with the suggested measure.
Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets (see CALGreen Divisions 4.3 and 5.3 as well as Appendices A4.3 and A5.3).	The proposed project would be required to comply with the residential water efficiency regulations within the CALGreen Code. Thus, the proposed project would comply with the suggested measure.
Require the use of energy-efficient lighting for all street, parking, and area lighting.	All proposed exterior lighting would be LED type, consistent with the 2019 Building Energy Efficiency Standards. Thus, the proposed project would comply with the suggested measure.
Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from	The suggested mitigation measures included in the 2017 Scoping Plan are not considered to be requirements for local projects under CEQA, but instead represent options for projects to demonstrate compliance with the 2017 Scoping Plan. The inclusion of GHG off-set mitigation projects or the purchase of carbon credits is typically dependent on a project's exceedance of the

<b>Table 5 Project Consistency with the 2017 Scoping Plan</b>	
<b>Suggested Measure</b>	<b>Consistency Discussion</b>
California Air Pollution Control Officers Association (CAPCOA), the California Air Resources Board, or other similar entities determined acceptable by the local air district. The project may alternatively purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry (ACR), Climate Action Reserve (CAR) or other similar carbon credit registry determined to be acceptable by the local air district.	previously identified quantitative GHG thresholds. However, BAAQMD has not identified quantitative SB 32 thresholds that could be used to determine whether the project’s anticipated emissions would be such that an off-site mitigation project or purchase GHG reduction credits would be required in order to comply with SB 32.  Considering that the project has been shown to be generally consistent with the foregoing measures, the City, in its discretion as lead agency, has chosen not to require the project to implement an off-site mitigation project or purchase GHG reduction credits.
<i>Source: California Air Resources Board. AB 32 Scoping Plan [Appendix B]. Accessible at: <a href="https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm">https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm</a>. Accessed August 2020.</i>	

As shown in the table above, the proposed project would comply with a majority of the suggested measures and, thus, the proposed project would be considered generally consistent with the 2017 Scoping Plan. Because the 2017 Scoping Plan is the CARB’s strategy for meeting the State’s 2030 emissions goals established by SB 32, the project would be considered to comply with the goals of SB 32.

*Consistency with Plan Bay Area 2040*

The San Francisco Bay Area’s Plan Bay Area 2040 has been prepared jointly by the San Francisco Bay Area Metropolitan Transportation Commission (MTC) and the ABAG. Plan Bay Area 2040 is a regional plan intended to provide a strategy for the reduction of GHG emissions and air pollutants within the San Francisco Bay Area. The Plan Bay Area 2040 is a long-range plan that serves as a Regional Transportation Plan and Sustainable Communities Strategy (SCS). As an SCS, the Plan Bay Area 2040 is required to comply with regional targets for reducing GHG emissions through the integration of transportation and land use planning. ABAG has not provided a specified means of identifying an individual development project’s compliance with the Plan Bay Area 2040. For the purposes of this analysis, the proposed project is compared to the overall goal of the Plan Bay Area 2040, which is to reduce regional GHG emissions through the reduction of transportation-related emissions.

The proposed project would include new and expanded sidewalks along the frontage of Mitchell Canyon Road, which would provide pedestrian connections for future residents to access surrounding neighborhoods and public transit stops. The nearest public transit stop is the Clayton Road and Mitchell Canyon Road bus stop, which is located approximately 0.5-mile north of the project site. The proposed project’s pedestrian connectivity and proximity to public transit would help to reduce VMT levels.

Because the project would not be considered to significantly contribute to an increase in regional VMT, the proposed project would be considered consistent with the Plan Bay Area 2040, and would not conflict with the regional GHG reduction targets therein.

### *Conclusion*

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; and impacts would be considered ***less than significant***.

**9. HAZARDS AND HAZARDOUS MATERIALS.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	X		<input type="checkbox"/>
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
g.	Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

**a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?.....Less-Than-Significant Impact**

Discussion (a.)

The proposed project would include operations associated with residential uses. Operations of residential uses do not involve the routine transport, use, or disposal of hazardous materials. Thus, during operations, the proposed project would not create any hazards to the public or the environment through routine transport, use, disposal, or reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

Construction activities would involve the use of heavy equipment, which would contain fuels, oils, and hydraulic fluid. In addition, various other products such as concrete, paints, and adhesives would likely be used on-site. However, the project contractor would be required to comply with all California Health and Safety Codes and local ordinances regulating the temporary handling, storage, and transportation of hazardous and toxic materials, as overseen by the California Environmental Protection Agency (EPA) and

Department of Toxic Substances Control (DTSC). Should an accidental release of hazardous materials occur during construction, the City (or City crews) and/or contractor, is required to notify the Contra Costa Fire Protection District (CCCFPD), who would then monitor the conditions and recommend appropriate remediation measures.

Based on the above, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and a *less-than-significant* impact would occur.

- b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?.....  
..... Less-Than-Significant Impact With Mitigation Incorporated**

Discussion (b.)

The following discussion provides an analysis of potential hazards related to the existing on-site conditions and surrounding uses. The analysis of existing on-site conditions is based on a Phase I Environmental Site Assessment (ESA) conducted for the proposed project by AdvancedGeo (AGI) (see Appendix D).<sup>16</sup> The Phase I ESA includes findings from a Phase I and Phase II ESA prepared for the project site by AEI in 2019.

Historical uses of the project site consisted primarily of agricultural activities. Aerial photographs dating back to 1939 indicate that the project site was primarily used to farm orchards but was cleared of agricultural crops by the early 1980s. The site has since remained undeveloped. The 2019 Phase I ESA prepared by AEI indicated that agricultural chemicals such as pesticides, herbicides, and fertilizers related to the orchard may have been present within on-site soils at the time of site reconnaissance. Several soil samples were taken in September 2019 to screen for the presence of organochlorine pesticides (OCPs), metals, and petroleum hydrocarbons. Findings from the investigation indicated that metals, TPH, gasoline, diesel, and oil were present at very-low levels in on-site soils and below Environmental Screening Levels (ESLs). Arsenic was detected in five of the soil samples at concentrations above the residential Environmental Screening Level, but below the typical background concentrations for the region. In addition, lead was detected in five of the soil samples at background concentrations. Although the presence of potentially hazardous chemicals were determined to be present on-site, the 2019 Phase II ESA and the most recent Phase I ESA prepared for the proposed project determined that none of the identified chemicals were present in amounts sufficient to be considered a recognized environmental concern (REC).

Site reconnaissance for the project site was conducted by an AGI representative on February 20, 2020. The project site consisted primarily of undeveloped land with moderate growth of shrubs and trees. An approximately ten-foot by twenty-foot wooden shed was observed within the development site, as well as a water well. Absent information

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<sup>16</sup> AdvancedGeo. *Phase I Environmental Site Assessment: Clayton Trust Property APNs 121-090-011-2 and 121-090-016-1, Clayton, California, Project No. 20-4996.* February 24, 2020.



regarding the depth, use, ownership, and geology of a well, the mere presence of a well could be considered a REC due to potentially being a safety hazard. Accordingly, without proper abandonment, the existing well could pose a hazard to the general public.

Asbestos is the name for a group of naturally occurring silicate minerals that are considered to be “fibrous” and, through processing, can be separated into smaller and smaller fibers. The fibers are strong, durable, chemical resistant, and resistant to heat and fire. They are also long, thin, and flexible, such that they can be woven into cloth. Because of the above qualities, asbestos was considered an ideal product and has been used in thousands of consumer, industrial, maritime, automotive, scientific, and building products. However, later discoveries found that, when inhaled, the material caused serious illness. For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as “presumed asbestos-containing material” unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act. Although a small shed currently exists on the project site, AGI determined that evidence of asbestos-containing material was not present within the structure.

Lead-based paint (LBP) is defined by federal guidelines as any paint, varnish, stain, or other applied coating that has one milligram of lead per square centimeter or greater. Lead is a highly toxic material that may cause a range of serious illnesses, and in some cases death. In buildings constructed after 1978, the presence of LBP is unlikely. Structures built prior to 1978, and especially prior to the 1960s, are expected to contain LBP. Although a small shed currently exists on the project site, AGI determined that evidence of LBP was not present within the structure.

Sites with recognized environmental conditions surrounding the subject property are typically of concern to the subject property when they are located in an up-gradient direction from the property with respect to groundwater flow direction. The Phase I ESA analyzed historical uses of immediately adjoining properties and determined that adjacent properties have been primarily used for agriculture until the mid-1960s, when residential development commenced to the southeast of the project site. By the early 1990s, residential development had occurred on all sides except for the south, which remains currently undeveloped. A review of various environmental databases containing local, state, and federally recognized hazardous sites determined that current and historical surrounding uses did not pose an environmental risk to the project site. Therefore, impacts would be unlikely to occur.

In summary, impacts related to the release of agricultural chemicals or exposure of construction workers to asbestos or lead-based paint would not occur. However, the proposed project would necessitate the removal of an existing on-site water well. Without proper abandonment of the existing on-site water well, the proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and a *potentially significant* impact could occur.

Mitigation Measure(s)

The following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

**Mitigation Measure 18.** *Prior to initiation of any ground disturbance activities, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from Contra Costa Health Services and properly abandon the on-site well to the satisfaction of the Contra Costa Health Services Department. Proof of abandonment shall be provided to the City of Clayton Community Development Department and City Engineer.*

- c. **Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? .....Less-Than-Significant Impact**

Discussion (c.)

The project site is not located within one-quarter mile of any school. The nearest school is Mount Diablo Elementary School, located approximately 0.44-mile northeast of the project site. Therefore, the proposed project would result in a *less-than-significant* impact associated with emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a school.

- d. **Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ..... No Impact**

Discussion (d.)

The proposed project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5,<sup>17</sup> and would not create a significant hazard to the public or the environment. Therefore, *no impact* would occur.

- e. **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? ..... No Impact**

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<sup>17</sup> California Department of Toxic Substances Control. *EnviroStor*. Available at: <https://www.envirostor.dtsc.ca.gov/public/>. Accessed August 2020.

Discussion (e.)

The nearest airport to the proposed project site is the Buchanan Field Airport, located approximately eight miles to the west of the site. Therefore, the proposed project site is not located within an airport land use plan or within the vicinity of a public or private airport. As such, the project would not result in a safety hazard for people residing or working in the project area, and *no impact* would occur.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? .....Less-Than-Significant Impact**

Discussion (f.)

The City of Clayton has an adopted Emergency Operations Plan, dated January 2012, which identifies the City’s emergency planning, organizational, and response policies and procedures. The Emergency Operations Plan addresses how the City would respond to extraordinary events or disasters, including departmental Standard Operating Procedures. The primary exit routes out of the City to the north are Pine Hollow Road, Clayton Road, and Concord Boulevard. To the south, the primary exit route out of the City is Marsh Creek Road.

Although the proposed project would involve improvements to the Mitchell Canyon Road frontage, the improvements would not significantly impede vehicle traffic in the event of a major evacuation. In addition, during project construction, all equipment and materials would be staged on-site and would not substantially interfere with existing roadway operations. Furthermore, the proposed on-site roadway would provide adequate emergency access to future residents of the proposed development and emergency responders. Therefore, the proposed project would result in a *less-than-significant* impact associated with impairing implementation of, or physically interfering with, an adopted emergency response plan or emergency evacuation plan.

- g. Would the project expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires? .....Less-Than-Significant Impact**

Discussion (g.)

According to the Diablo Fire Safe Council, the City of Clayton and adjoining areas within a wildland urban interface (WUI) are at significant risk from wildfire. The WUI is defined as an area in which wildlands and communities are sufficiently close to each other to present a credible risk of fire spreading from one to another.<sup>18</sup> In compliance with the CBC (specifically Section 903.2.1.3, Group A-3), the design of the residences would include automatic fire sprinklers, and fire alarm systems would be incorporated pursuant to California Fire Code (CFC) requirements. Such features would help to address fire situations within the site, which would reduce the demand for fire protection services from the project site. Fire services to the Clayton area are provided by the CCCFPD, with the

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<sup>18</sup> Diablo Fire Safe Council. *Clayton Morgan Territory Wildfire Action Plan: Public Review Draft*. January 25, 2016.

nearest station located approximately 1.3 miles east of the site by way of Mitchell Canyon Road and Clayton Road.

The proposed residential units are required to be designed in compliance with all applicable State and local standards and recommendations for new development, such as the CCCFPD's requirements for providing a water supply system for fire protection, and providing adequate emergency and fire access. Therefore, the proposed project would not expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires, and *less-than-significant* impact would occur.

## 10. HYDROLOGY AND WATER QUALITY

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	Result in substantial erosion or siltation on- or off-site;			X	
ii.	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
iii.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv.	Impede or redirect flood flows?			X	
d.	In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

**a. Would the project violate any water quality standards or waste discharge requirements? .....Less-Than-Significant Impact**

Discussion (a.)

Water quality and runoff issues associated with construction and operation of the proposed project are discussed in detail below.

*Construction*

Per the Geotechnical Report prepared for the project site, near-surface soils on the project site were determined to have a very slow infiltration rate when thoroughly wet, thus indicating a high potential for stormwater runoff to contribute to substantial erosion. In addition, during the early stages of construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality downstream.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a

land disturbance of one or more acres. The City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the site. A SWPPP describes Best Management Practices (BMPs) to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project. Because the proposed project would disturb greater than one acre of land, the proposed project would be subject to the requirements of the State's General Construction Permit. Compliance with such requirements would minimize the potential for polluted runoff to leave the site during construction activities. Furthermore, Mitigation Measure 9, Mitigation Measure 10, and Mitigation Measure 11 of this IS/MND contain specific BMP requirements that the project applicant would be required to comply with during construction in order to protect the seasonal wetland and ephemeral stream features within the project site from impacts related to erosion.

### *Operation*

The proposed residential uses would not involve operations typically associated with the generation or discharge of polluted water. Thus, typical operations on the project site would not violate any water quality standards or waste discharge requirements, nor degrade water quality. However, addition of the impervious surfaces on the site would result in the generation of urban runoff, which could contain pollutants if the runoff comes into contact with vehicle fluids on parking surfaces and/or landscape fertilizers and herbicides. All municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide NPDES permit.

The City of Clayton has adopted the County C.3 Stormwater Standards, which require new development and redevelopment projects that create or alter 10,000 or more sf of impervious area to contain and treat all stormwater runoff from the project site. Given that the proposed project would create approximately 37,001 sf of impervious area, the proposed project would be subject to the requirements of the SWRCB and the Regional Water Quality Control Board (RWQCB), including the C.3 Standards, which are included in the City's NPDES General Permit. Compliance with such requirements would ensure that impacts to water quality standards or waste discharge requirements would not occur during operation of the proposed project.

The Preliminary Stormwater Control Plan (SWCP) prepared for the proposed project conforms with the most recent Contra Costa Clean Water Program Stormwater C.3 Guidebook and verifies that the proposed project would comply with all City stormwater requirements. In compliance with the C.3 Guidebook, the proposed project would include two bio-retention basins (Basin A and Basin B) located in proximity to Mitchell Canyon Road and adjacent to the open space area, respectively (see Figure 12). Runoff from the developed portions of the site would be routed to the proposed bio-retention basins. The portion of the site that would remain in open space would be self-treating.

According to the Preliminary SWCP prepared for the project, the basins would be sized to exceed the minimum volume requirement necessary to adequately handle all runoff from the proposed impervious surfaces and landscaping (see Figure 12).

*Bio-Retention Basin A:* Runoff from pavement, rooftop and landscaped areas within Lots #1, #2, and Lots #16 through #18, would be directed to bio-retention Basin A located to the west of Mitchell Canyon Road and to east of Lot #1. Bio-retention Basin A is comprised of an irregular shaped landscape area of approximately 4,678 sf. Treated water from bio-retention Basin A would flow through a 12-inch storm drain and connect to an existing storm drain in Mitchell Canyon Road.

*Bio-Retention Basin B:* Runoff from Lots #3 through #15, including pavement, rooftop and landscaped areas, would be directed to Bio-retention Basin B, located adjacent to the western boundary of Lot #7 and to the east of the open space area. Treated water from Bio-retention Basin B would flow through an 18-inch storm drain and connect to a storm drain outfall located within the open space area. The storm drain outfall would incorporate an energy dissipator which would slow the release of discharged water to protect slopes within the open space area from erosion. Bio-retention Basin B is comprised of an irregular shaped landscape area of approximately 11,980 sf.

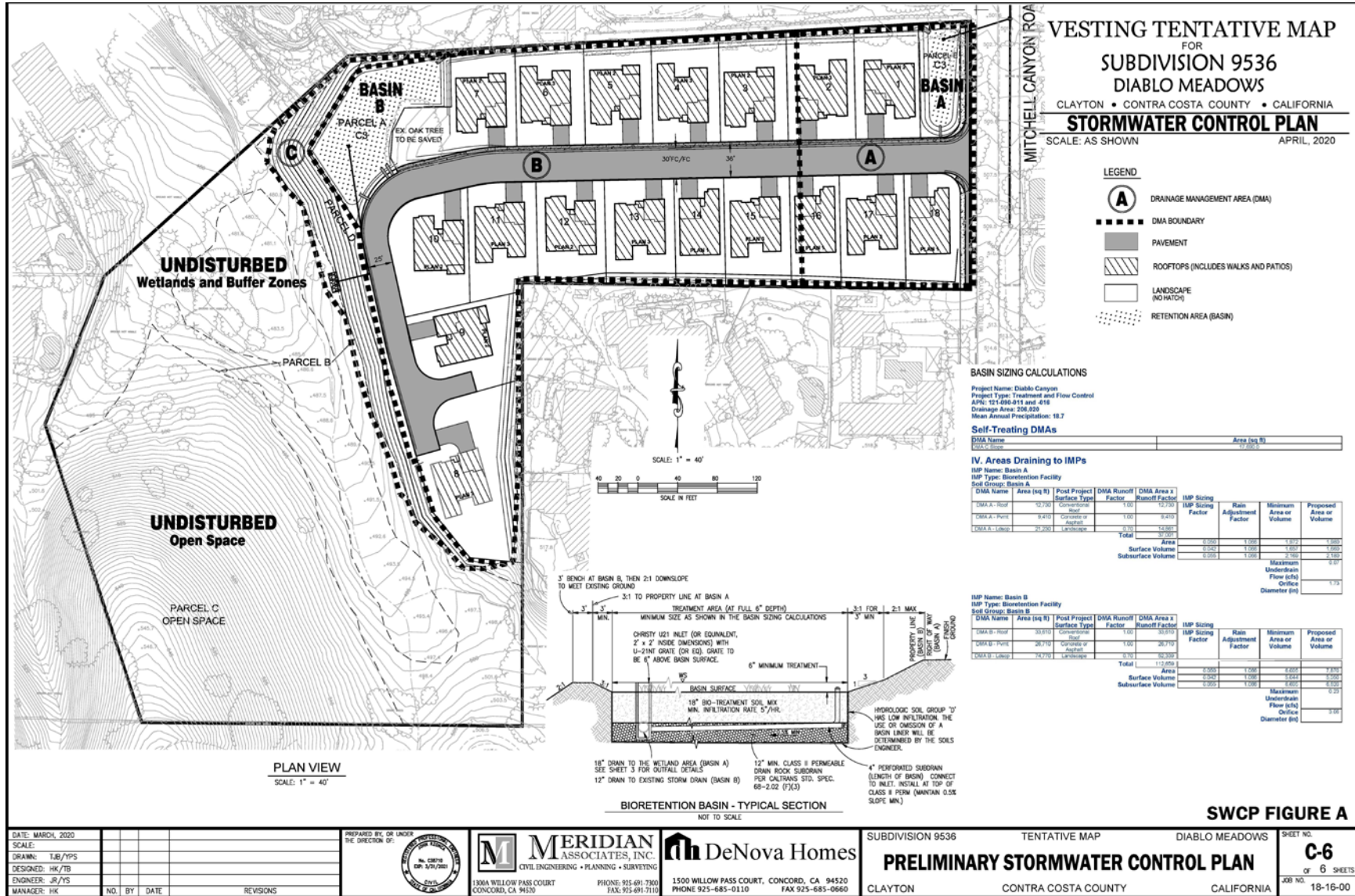
The bio-retention basins would remove pollutants primarily by filtering runoff slowly through an active layer of soil. The process of stormwater moving through the soil layers would remove pollutants from the stormwater prior to subsurface infiltration or discharge to City infrastructure. Each of the bio-retention basins would be designed and constructed according to criteria from the Contra Costa Clean Water Program Stormwater C.3 Guidebook. Specifically, the bio-retention basins would include 18-inch depth soil mix with minimum long-term percolation rate of five inches per hour, and a perforated pipe under drain would be bedded near the top with holes facing downward. In addition, the bio retention areas would be designed to accommodate runoff for treatment and hydro-modification as specified in the C.3 manual.

Based on the above, the proposed project would comply with the requirements of the SWRCB and the RWQCB, and would meet or exceed C.3 Standards. Therefore, during operation, the project would comply with all relevant water quality standards and waste discharge requirements, and would not degrade water quality.

### *Conclusion*

Based on the Preliminary SWCP prepared for the proposed project, the project would comply with all applicable regulations during operation, does not involve uses associated with the generation or discharge of polluted water, and would be designed to adequately treat stormwater runoff from the site prior to discharge. Therefore, a *less-than-significant* impact would occur

**Figure 12  
Stormwater Control Plan**





- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?.....Less-Than-Significant Impact**
- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? .....Less-Than-Significant Impact**

Discussion (b. and e.)

The Contra Costa Water District (CCWD) provides domestic water service to Clayton. The major source of CCWD water is the Sacramento River Contra Costa Water District Canal, not pumped groundwater. The construction of 18 new residential buildings and associated improvements would result in a net increase in impervious surfaces; however, the surface area would not be large enough to significantly affect groundwater recharge. Additionally, approximately 50 percent of the project site would remain in open space and the bio-retention areas within the development area would allow for stormwater to infiltrate into the surrounding soil, thereby allowing the continued contribution to groundwater recharge at the site.

As such, the proposed project would not substantially deplete groundwater supplies or recharge at the site such that the project may impede sustainable groundwater management of the basin and would not conflict with an applicable groundwater management plan or water quality control plan. Thus, a *less-than-significant* impact would occur.

- ci. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site? .....Less-Than-Significant Impact**
- cii. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? .....Less-Than-Significant Impact**
- ciii. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would**

**create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?.....Less-Than-Significant Impact**

Discussion (ci., cii., and ciii.)

As discussed above, runoff from the impervious areas of the site would be collected and conveyed to the proposed bio-retention basins. Per the Preliminary SWCP, the bio-retention facilities would be designed to exceed the minimum volume needed to treat and control runoff from all proposed impervious surfaces. Therefore, despite the proposed project's increase in impermeable surfaces, the proposed project would not result in an increase in stormwater runoff leaving the site as compared to the runoff conditions that currently occur at the site. Furthermore, runoff entering the bio-retention basins would be able to partially infiltrate the soil in a similar manner to what currently occurs on the project site. Excess runoff not captured by the bio-retention area would be discharged to either the City's existing stormwater system or the on-site open space area through the stormwater outfall.

In order to ensure that the proposed project's stormwater treatment facilities remain adequate, long-term maintenance would be required. Routine maintenance of the facilities is necessary to ensure that infiltration of water is unobstructed, erosion is prevented, and soils are held together by biologically active plant roots. Proper operation and maintenance of the stormwater management facilities would be the sole responsibility of the property owner. In accordance with Clayton Municipal Code Section 13.12.050, implementation of an approved SWCP and submittal of an approved Stormwater Control Operation and Maintenance Plan by the applicant shall be a condition precedent to a final building inspection or the issuance of a certificate of occupancy. All inspections and remedial actions would be logged in a Stormwater BMP Inspection and Maintenance Log.

Based on the above, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Consequently, the proposed project would result in a *less-than-significant* impact.

**civ. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would Impede or redirect flood flows?.....Less-Than-Significant Impact**

Discussion (civ.)

Based on the FEMA Flood Insurance Rate Map (FIRM) # 06013C0312F, dated June 16, 2009, the project site is within Zone X, which is described by FEMA as an area determined to be outside the 0.2 percent annual chance floodplain. In addition, dams or levees are not

located upstream of the proposed project site; thus, flooding due to dam or levee failure would not occur. Because the project site is not within a 100-year floodplain, the proposed project would not place housing or structures within a 100-year floodplain or expose people or structures to risks involving flooding. Therefore, impacts would be *less-than-significant*.

- d. **If in flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? ..... No Impact**

Discussion (d.)

A seiche is defined as a wave generated by rapid displacement of water within a reservoir or lake, due to an earthquake that triggers land movement within the water body or land sliding into or beneath the water body. The project site is not located near a water body that is susceptible to seiche hazard. Furthermore, due to the distance from the project site to the nearest coastline the project site would not be subject to tsunami hazards. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving seiche, tsunami, or mudflow, and *no impact* would occur.

**11. LAND USE.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

**a. Would the project physically divide an established community? ..... No Impact**

Discussion (a.)

The proposed project site is currently undeveloped and is absent of any housing or habitable structures. One shed and a water well are located within the northwestern portion of the development area. Currently, existing land uses in the project vicinity include single-family residences to the north, west, and east, across Mitchell Canyon Road, and the CEMEX quarry plant just beyond the vacant land that borders the project site to the south. The proposed residences would be compatible with the existing residential development in the project area. Given that the proposed project would involve construction on a currently undeveloped site, and would not involve any features that would divide an established community, the proposed project would not physically divide an established community and *no impact* would occur.

**b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?..... Less-Than-Significant Impact**

Discussion (b.)

The proposed project includes a request to Rezone the site from R-15 to PD. The 8.68-acre project site has been anticipated for 25 medium-density residential units per the General Plan land use designation for the site.<sup>19</sup> However, due to the steep topography and sensitive environmental features within the western portion of the project site, residential development would only be feasible on approximately 4.62 acres of the project site. In order to preserve the natural open space features, as well as to meet the current General Plan density requirements, the requested Rezone would reduce the minimum number of allowable units on the entire project site to 18 single-family residences. In addition, the proposed project would not conflict with any City policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect. For example, the proposed project would comply with the City of Clayton Noise Element, as demonstrated in Section 13 of the IS/MND. Additionally, as discussed in Section 4, Biological Resources, of this IS/MND, the proposed project would, with mitigation included, comply with Chapter

<sup>19</sup> City of Clayton. *City of Clay General Plan Section II: Land Use Element* [pg. 18]. Available at: <https://ci.clayton.ca.us/community-development/planning/long-range-planning/>. Accessed August 2020.

15.70, Tree Protection, of the City's Municipal Code. As such, the project would not conflict with any applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect, and a *less-than-significant* impact would occur.

**12. MINERAL RESOURCES.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

- a. **Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ..... No Impact**
  
- b. **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ..... No Impact**

Discussion (a. and b.)

According to the Contra Costa County General Plan, the nearest mineral resource or mineral resource recovery site within the City of Clayton is the CEMEX quarry plant, located less than 0.3-mile south of the project site. Although the CEMEX quarry plant is located in close proximity to the project site, the project site has been previously designated for residential uses by the City of Clayton and is separated from the CEMEX quarry plant by existing residential uses. The project site is not known to contain mineral resources and is not designated as a mineral resource recovery site. As such, the project would not interfere with existing operations or access to such deposits. Therefore, the proposed project would have *no impact* to mineral resources.

**13. NOISE.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project result in:</i>					
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

**a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies? ..... Less-Than-Significant Impact**

**c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? .....Less-Than-Significant Impact**

Discussion (a. and c.)

As discussed in the Transportation section of this IS/MND, operation of the project would result in a minor increase in traffic to the local roadway network, which would result in a slight increase in the ambient noise environment. The City’s noise standards for outdoor and indoor spaces are set forth in Policy 2a of the Clayton General Plan, as follows: 45 Ldn for indoor noise level uses, and 60 Ldn for outdoor noise level. The day/night average level (L<sub>dn</sub>) is based upon the average noise level over a 24-hour day, with a +10 decibel (dB) weighting applied to noise occurring during nighttime (10:00 PM. to 7:00 AM) hours. A total of 32 new peak hour vehicle trips on local roadways resulting from the project would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Furthermore, noise level increases would not be perceptible until they reach 3 dB or above, as compared to ambient noise levels, and the relatively minor increase in traffic volumes attributable to project-related vehicles would not be sufficient to result in a 3 dB increase in noise.

Therefore, the proposed project would not result in exposure of persons to or generation of noise levels in excess of standards established in the local General Plan, nor would the project result in a permanent increase in ambient noise levels in the project vicinity, and impacts would be considered *less-than-significant*.

- b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? .....Less-Than-Significant Impact**

Discussion (b.)

Groundborne vibrations would be generated during construction of the proposed project. The development area of the site, where construction would take place, is bordered by residential land uses to the north, east, and west. For structural damage, the California Department of Transportation (Caltrans) uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec, PPV), for buildings structurally sound and designed to modern engineering standards; 0.2 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern; and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened. All surrounding structures are assumed to be structurally sound, but damage would be a concern; thus, the 0.2 in/sec PPV will be used as a threshold of significance for structural damage. The threshold of 0.1 in/sec PPV is also used by Caltrans as the threshold for human annoyance caused by vibration. Therefore, activities creating vibrations exceeding 0.1 in/sec PPV would impact sensitive receptors in nearby residences.<sup>20</sup> Table 6 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet.

Project construction activities, such as drilling, the use of jackhammers, and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may generate groundborne vibration in the immediate vicinity. As shown in the table, jackhammers typically generate vibration levels of 0.035 in/sec PPV, and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. The use of vibratory rollers may be required for construction of the proposed internal roadway; however, use of the vibratory roller would occur well over 25 feet from nearby existing residences.

<b>Table 6</b>	
<b>Vibration Source Levels for Construction Equipment</b>	
<b>Equipment</b>	<b>PPV at 25 ft (in/sec)</b>
Vibratory Roller	0.210
Large Bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
<i>Source: Caltrans, Transportation and Construction Vibration: Guidance Manual. September 2013.</i>	

<sup>20</sup> Caltrans. *Transportation and Construction Vibration Guidance Manual*. September 2013.



Therefore, the maximum PPV that could occur during construction of the proposed project would be 0.1 in/sec PPV or less, which is below the 0.2 in/sec PPV significance threshold utilized for this analysis. The nearest vibration-sensitive receptors would be the existing surrounding residential uses. Although vibration generated by construction activities associated with the proposed project could be perceptible at nearby residences, the construction-generated vibrations would not be expected to result in structural damage to the residences associated with the proposed project.

Furthermore, construction is temporary and construction equipment would operate intermittently throughout the course of a day. Construction activities would be restricted to daytime hours per the City of Clayton Municipal Code Section 15.01.101 and would only occur over portions of the improvement area at a time.

Therefore, the project would not involve the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels, resulting in a *less-than-significant* impact.

- d. **Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? ..... Less-Than-Significant With Mitigation**

Discussion (d.)

Construction of the project would result in temporarily increased noise levels from grading and construction activities on the project site. Per Chapter 15 of the City's Municipal Code, construction activities would only be allowed during the permitted hours of 7:00 AM and 5:00 PM Monday through Friday. Any such work beyond said hours and days would be strictly prohibited unless previously authorized in writing by the City Engineer or by project conditions of approval. Noise associated with construction activities would include mechanical equipment such as earthmovers, dump trucks, and similar equipment which would be used to grade the site. After grading is complete, construction noise would include delivery of construction materials, construction of foundations, framing, roofing, and similar operations that would temporarily generate noise. Based on the Federal Highway Administration's Construction Noise Handbook, activities involved in typical construction would generate maximum noise levels up to 90 dB at a distance of 50 feet.<sup>21</sup> The nearest sensitive receptors to the construction noise would be the residences surrounding the project site. Construction activity would likely only occur over portions of the improvement area at a time. Because noise levels dissipate with distance from the source, noise levels received by the surrounding sensitive receptors would fluctuate depending on the distance of the noise source on the project site from the fixed location of the receptor. Although construction activities would only occur for a limited duration, project construction activities could generate noise levels that would result in temporary increases in ambient noise levels in the project vicinity. Therefore, the proposed project's impact would be considered *potentially significant*.

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<sup>21</sup> Federal Highway Administration. *Highway Traffic Noise: Construction Noise Handbook*. Updated 11/30/2015.  
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Mitigation Measure(s)

Implementation of the following mitigation measure would ensure that the above potential impact is reduced to a *less-than-significant* level.

**Mitigation Measure 19.** *During grading and construction, the project contractor shall ensure that the following measures are implemented:*

- *Grading and construction activities shall be limited to the daytime hours between 7:00 AM to 5:00 PM Monday through Friday, as specified in Section 15.01.101 of the Clayton Municipal Code. Any such work beyond said hours and days is strictly prohibited unless previously specifically authorized in writing by the City Engineer or designee or by project conditions of approval;*
- *The distances between on-site construction and demolition staging areas and the nearest surrounding residences shall be maximized to the extent possible; and*
- *All construction and demolition equipment that utilizes internal combustion engines shall be fitted with manufacturer's mufflers or equivalent.*

**e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ..... Less-Than-Significant Impact**

**f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? ..... Less-Than-Significant Impact**

Discussion (e. and f.)

The project site is not located near an existing airport and is not within an area covered by an existing airport land use plan. The nearest airport is Buchanan Airport, which is over eight miles away in unincorporated Contra Costa County, northwest of the City of Concord. Aircraft-related noise, if audible at the project site, would be minimal. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with air traffic and a *less-than-significant* impact would occur.

**14. POPULATION AND HOUSING.**

ISSUES	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

- a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? .....Less-Than-Significant Impact**

Discussion (a.)

The proposed project would include the development of 18 single-family homes and three ADU’s, and, thus, would induce population growth. Using the Department of Finance average persons per household value for the City of Clayton of 2.72, the proposed project’s addition of 18 residential units would result in approximately 58 new residents.<sup>22</sup> In comparison, buildout at the current zoning designation would result in a minimum of 25 residential units, which would permit approximately 68 new residents at the project site. The proposed project would result in ten fewer residents than was previously planned for the site. Because the site has been previously anticipated for residential development, no impacts related to unplanned growth would occur.

In addition, the Department of Finance estimates the 2019 population of Clayton, based on the 2010 Census, to be approximately 10,897.<sup>23</sup> The increase in population of 58 new residents would constitute a 0.53 percent increase in the City’s population. A 0.53 percent increase in population would not be considered substantial growth. It should be noted that population growth itself does not constitute an environmental impact; rather, increased demands on the physical environment resulting from increases in population are considered environmental impacts. For example, increased demands on City services could require system upgrades that could have indirect environmental impacts. Physical environmental effects associated with development of the proposed project are evaluated throughout this IS/MND. For example, as discussed in Section 19, Utilities and Service Systems, of this IS/MND, adequate utility infrastructure would be available to support the proposed project. Consequently, a *less-than-significant* impact would occur in regard to the project inducing substantial unplanned population growth.

<sup>22</sup> California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019, with 2010 Benchmark*. Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>. Accessed June 2020.

<sup>23</sup> *Ibid.*

- b. **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?..... No Impact**

Discussion (b.)

The project site is currently undeveloped and absent of housing or other habitable structures. As such, implementation of the proposed project would not displace substantial numbers of housing or people, necessitating the construction of replacement housing elsewhere, and *no impact* would occur.

**15. PUBLIC SERVICES.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

- a. **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection? .....Less-Than-Significant Impact**
- b. **Police protection? .....Less-Than-Significant Impact**

Discussion (a. and b.)

The CCCFPD provides fire prevention, suppression, and emergency medical response for advanced and basic life support to nine cities, including Clayton, and much of the unincorporated territory in the central and western portions of Contra Costa County. The nearest fire station is located at 6500 Center Street, approximately 1.3 miles northeast of the project site by way of Mitchell Canyon Road. Police protection services would be provided for the project by the City of Clayton Police Department. The Police Department is located at 6000 Heritage Trail, which is approximately one mile north from the proposed project site.

The threshold for the impact, as identified in Appendix G of the CEQA Guidelines, is related to whether the project would result in substantial adverse physical impacts associated with the provision of new or physically altered fire or police facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios or performance objectives. In the court case *City of Hayward v. Board of Trustees of the California State University*, the First District Court of Appeal affirmed that the focus of CEQA analysis should be limited to physical environmental impacts related to a project.<sup>24</sup> The court held that, “The need for additional fire protection services is not an *environmental* impact that CEQA requires a Project Proponent to mitigate.”

<sup>24</sup> First District Court of Appeal. *City of Hayward v. Board of Trustees of the California State University*. (November 30, 2015) 242 Cal.App.4<sup>th</sup> 833.

Given the relatively modest amount of development included in the proposed project (18 single-family residential units and three ADUs), the project would not substantially increase demand for fire and police protection services such that construction of a new facility or expansion of an existing facility would be required. Furthermore, the entitlements being requested would result in a slightly reduced development potential for the project site. Moreover, the City of Clayton Municipal Code Chapter 3.18 establishes development fees to off-set any potential impacts on fire services from new developments. The developer is required to pay the fire protection fee prior to the issuance of a building permit for each unit.

Because the project would not necessitate new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire or police protection, a *less-than-significant* impact would result.

**c. Schools?..... Less-Than-Significant Impact**

Discussion (c.)

The City of Clayton is located within the Mt. Diablo Unified School District (MDUSD). Mt. Diablo Elementary and Diablo View Middle Schools serve the City of Clayton.

Because the proposed project would involve the construction and operation of 18 residential units, the project could add students to the MDUSD. However, the construction of 18 single-family residential units and three ADUs would not create a significant number of new K-12 students. Furthermore, the Leroy F. Greene Act requires the payment of impact fees to avoid potential impacts to school facilities. According to the Leroy F. Greene Act, payment of the necessary school impact fees for the project would be considered full and satisfactory CEQA mitigation. The Act prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “[...] legislative or adjudicative act [...] involving [...] the planning, use, or development of real property” (Government Code 65996[b]). Because the project applicant would be required to pay school impact fees to the MDUSD, the proposed project would have a *less-than-significant* impact on schools in the area.

**d. Parks?.....Less-Than-Significant Impact**

Discussion (d.)

The proposed project would include construction and operation of 18 residential units, and, thus, would result in a relatively modest increase in demand for parks and recreational facilities. The project site is located adjacent to several nearby City parks, including the Clayton Community Park, which would likely be used by future project residents. In addition, Mount Diablo State Park is located to the south of the site. Section 16.12 of the City of Clayton Municipal Code requires all new subdivisions to dedicate land, pay a fee in-lieu thereof, or both for park or recreational purposes. For projects with 50 parcels or less, such as the proposed project, the subdivider must pay a fee equal to the land value of the portion of the local park required to serve the needs of the project residents. Payment of in-lieu fees would help to fund recreational facilities within the City. Therefore, the proposed project would result in a *less-than-significant* impact to park facilities.

e. **Other public facilities? .....Less-Than-Significant Impact**

Discussion (e.)

The proposed project would increase demands for other general governmental services, including, but not limited to, libraries and general City maintenance services. However, given the limited amount of development proposed (18 single-family units and three ADUs), such increased demands would not be substantial. With payment of the required development impact fees by the project applicant, the proposed project would result in a *less-than-significant* impact in regard to such public facilities.

**16. RECREATION.**

<b>Issues</b>	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

- a. **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? .....Less-Than-Significant Impact**
  
- b. **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? .....Less-Than-Significant Impact**

Discussion (a. and b.)

The project site is located adjacent to several nearby City parks, including the Clayton Community Park, which would likely be used by future project residents. In addition, Mount Diablo State Park is located to the south of the site. As discussed in Section 15, Public Services, of this IS/MND, the proposed project would be subject to the payment of an in-lieu fee in accordance with the City of Clayton Municipal Code Section 16.12. The payment of fees would be used to upgrade and maintain existing facilities, as well as provide for future facilities. Furthermore, the proposed project would only include 18 residential lots. The limited number of anticipated residents at the site would not result in increased use of recreational facilities to such a degree that significant deterioration of existing facilities would occur or construction of new facilities would be required. Therefore, given that the proposed project would be subject to the payment of the City’s in-lieu fee, the project would not increase the use of existing parks or recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and the project would not include or require the construction or expansion of recreational facilities. Thus, a *less-than-significant* impact would occur.



**17. TRANSPORTATION.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c.	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
d.	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
e.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	

a. **Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? .....Less-Than-Significant Impact**

b. **Would the project Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? .....Less-Than-Significant Impact**

Discussion (a.)

Primary access to the proposed project site would be provided by a new private roadway that would extend southwestward through the site from Mitchell Canyon Road.

The Institute of Traffic Engineer’s (ITE) *Trip Generation Handbook* was used to estimate weekday AM, PM, and daily trip generation forecasts for the proposed project.<sup>25</sup> As shown in Table 7, implementation of the proposed project would be expected result in 193 new daily vehicle trips, with approximately 16 new AM and 20 new PM peak hour vehicle trips.

<sup>25</sup> Institute of Transportation Engineers. *Trip Generation Handbook, 9<sup>th</sup> Edition*. September 2012.

Land Use	Units	Rate	Daily Trips	AM Peak Hour			PM Peak Hour				
				Rate	In	Out	Total	Rate	In	Out	Total
Single Family Residential	18	9.52	171	0.75	3	10	14	1.00	11	7	18
ADUs <sup>26</sup>	3	7.32	22	0.46	1	1	2	0.56	1	1	2
<b>Project Total</b>			<b>193</b>	<b>N/A</b>	<b>4</b>	<b>11</b>	<b>16</b>	<b>N/A</b>	<b>12</b>	<b>8</b>	<b>20</b>

Note: AM and PM Peak Hour total trips may not match combined 'In' and 'Out' trips due to rounding.

Source: Institute of Transportation Engineers, 2012.

According to the Contra Costa Transportation Authority (CCTA) Congestion Management Plan (CMP), any land development application generating less than 100 peak hour trips is not required to prepare a study of its traffic impacts on the CMP network.<sup>27</sup> Because the proposed project would generate substantially less than 100 peak hour trips, preparation of a traffic study is not required, and the project would not be considered to conflict with the CCTA CMP.

The project area is currently provided transit service by the Central Contra Costa Transit Authority. The nearest bus stop relative to the project site is located at the Clayton Road/Mitchell Canyon Road intersection, approximately 0.5-mile north of the site. The construction of 18 single-family residences and three ADUs would not result in the need for expanded bus service in Clayton. The project does not include changes to existing bicycle infrastructure, or changes that would conflict with the use of bicycle facilities as an alternative means of transportation. With regard to pedestrian facilities, the project would include the construction of a sidewalk along the northern boundary of the proposed internal street within the project site, extending along the project frontage at Mitchell Canyon Road. Thus, the project would not conflict with transit, roadway, bicycle, or pedestrian facilities.

The project applicant would be required to pay off-site arterial street improvement impact fees to the City to offset congestion issues on local arterial roadways. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities and a *less-than-significant* impact would occur.

- c. **Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?** ..... **No Impact**

Discussion (b.)

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts, including impacts based on VMT beginning July 1, 2020. Per Section 15064.3, analysis of vehicle miles traveled (VMT) attributable to a project is the most appropriate measure of transportation impacts. A qualitative discussion of impacts

<sup>26</sup> Placer County. *Brady Vineyard Subdivision Project Draft EIR*. November 2019.

<sup>27</sup> Contra Costa Transportation Authority. *2019 Update of the Contra Costa Congestion Management Program* [page 72]. Adopted December 18, 2019.

based on VMT has been provided below in compliance with the most recent CEQA Guidelines.

As mentioned previously, single-family residential units generate approximately 9.52 vehicle trips per unit per day. Buildout of the project site at the current zoning designation would produce a minimum of 25 units and would result in approximately 238 average daily trips (ADT) from the project site. In comparison, the proposed project includes a request to Rezone the site, which would allow for a reduction in the minimum number of single-family residential units from 25 to 18. Buildout of 18 single-family residential units and three ADUs would generate approximately 193 ADT. Thus, the proposed project would be anticipated to produce 45 fewer daily vehicle trips than what would occur with buildout of the site as was originally planned by the City. Because fewer vehicle trips would be made from the site, VMT for the entire site would be reduced, and project-related VMT would be less than what has been anticipated for the site. Because the proposed project would produce less VMT than what was anticipated for the site in the City's General Plan, the proposed project would not result in any new or more severe impacts relate to citywide VMT.

Per Section 15064.3(3), a lead agency may also analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. While changes to driving conditions that increase intersection delay are an important consideration for traffic operations and management, the method of analysis does not fully describe environmental effects associated with fuel consumption, emissions, and public health. Section 15064.3(3) changes the focus of transportation impact analysis in CEQA from measuring impact to drivers to measuring the impact of driving. For example, development of the proposed project would include pedestrian infrastructure within the project site, such as new sidewalks along the northern boundary of the proposed internal road and the project frontage of Mitchell Canyon Road. The proposed sidewalks could be connected to expanded sidewalk networks along Mitchell Canyon Road in the future, thus increasing connectivity to surrounding neighborhoods and public transit connections approximately 0.5-mile north of the site.

As mentioned previously, the project site is located in close proximity to alternative forms of transportation, including bus routes. The project area is currently provided transit service by the Central Contra Costa Transit Authority. The nearest bus stop relative to the project site is located at the Clayton Road/Mitchell Canyon Road intersection, approximately 0.5-mile north of the site. Transit would provide access to several grocery stores, restaurants, banks, and schools within close proximity to the project site. The site's access to public transit and proximity to such uses would reduce VMT and, consequently, fuel consumption associated with the proposed project, thereby providing for increased pedestrian connectivity with the surrounding area and resulting in reduced vehicle use.

Based on the above, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and a *less-than-significant* impact would occur.

- d. **Would the project result in inadequate emergency access? .....Less-Than-Significant Impact**
- e. **Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? .....Less-Than-Significant Impact**

Discussion (c. and d.)

The proposed project does not include changes to existing roadways or the introduction of any design features that would be considered hazardous. The proposed project would provide an access point at Mitchell Canyon Road, which would provide sufficient emergency access to the site and would be designed in compliance with CCCFPD. As such, the project would not substantially increase hazards due to design features or incompatible uses, and emergency access to the site would be adequate. Therefore, the project would result in a *less-than-significant* impact.

**18. TRIBAL CULTURAL RESOURCES**

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

**a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?..... Less-Than-Significant Impact**

**b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?..... Less-Than-Significant Impact**

Discussion (a. and b.)

As discussed in Section 5, Cultural Resources, of this IS/MND, the project site does not contain any existing permanent structures or any other known resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of official resources as defined in Public Resources Code Section 5020.1(k), and does not contain known resources that could be considered historic pursuant to the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Tribal cultural resources are generally defined by Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. In compliance with Assembly Bill 52 consultation requirements, the City of Clayton sent notification letters to those tribes who had previously requested notification of projects in the City. Responses from such tribes have not been received to date. In the absence of information supplied by tribes, the City relied on other sources of information to determine

whether the project could cause a substantial adverse change in the significance of a tribal cultural resource.

A Sacred Lands File search, performed by the NAHC for the immediate project area, failed to indicate the presence of Native American cultural resources in the project area. Additionally, a search of the CHRIS was completed at the NWIC. As discussed in Section 5, Cultural Resources, of this IS/MND, the CHRIS search did not identify any cultural resources on the site. Given the negative results of the NAHC Sacred Lands File search, and the CHRIS search, as well as the City's compliance with Assembly Bill 52, tribal cultural resources are not expected to occur within the site. Although the project site is located in proximity to a water source, which were often focus points for Native American activity in the region, resource procurement sites for food, raw materials, and/or prominent topographic features that would indicate historical Native American activity have not been recorded within the project site or in the project vicinity.<sup>28</sup> Nevertheless, the possibility exists that development of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource if previously unknown tribal cultural resources are uncovered during grading or other ground-disturbing activities. However, Mitigation Measures 14 and 15 require that the appropriate actions be taken should any tribal cultural resources, human remains, or bone of unknown origin be found within the project site during construction activities. With the implementation of Mitigation Measures 14 and 15, the proposed project would not result in a substantial adverse change in the significance of a tribal cultural resource, and a *less-than-significant* impact would occur.

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<sup>28</sup> BASIN Research Associates, 2019.

**19. UTILITIES AND SERVICE SYSTEMS.**

<b>Issues</b>	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

- a. **Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?.....Less-Than-Significant Impact**
  
- b. **Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?.....Less-Than-Significant Impact**
  
- c. **Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?.....Less-Than-Significant Impact**

Discussion (a., b., and c.)

Electricity, natural gas, telecommunications, water, and sanitary sewer services would be provided by way of new connections to existing infrastructure in the immediate project area. Brief discussions of water, sewer service, stormwater drainage, electrical, natural gas, and telecommunications that would serve the proposed project are included below.

## *Water*

Potable water service for the project is required and would be made available by CCWD upon completion of financial arrangements and installation of all necessary water facilities to meet the requirements of residential use and fire protection, in accordance with current CCWD and CCCFPD standards. The project would include the connection of an on-site eight-inch water line to an existing water line within Mitchell Canyon Road.

According to the CCWD's 2015 Urban Water Management Plan (UWMP), the CCWD does not anticipate any supply deficits in normal years or single-dry years.<sup>29</sup> In future years, multiple dry-year conditions may result in supply shortfalls of up to approximately 30,000 acre-feet per year (af/yr), which equates to approximately 15 percent of the water demand. The CCWD's water supply reliability goal is to meet 100 percent of demand in normal years and a minimum of 85 percent of demand during a drought. Any potential supply shortfalls experienced during dry year conditions would be met through combination of a short-term conservation program or short-term water purchases. CCWD's currently available and planned supplies would be sufficient to meet the District's goal and estimated water demands during average, single-dry, and multiple-dry year conditions during the next 25 years. Given that the CCWD UWMP takes into account future buildout of the service area, and the proposed project's residential density is generally consistent with what has been anticipated for the site, the increase in water demand associated with the proposed project has generally been anticipated in the UWMP.

Given that the project would develop fewer units than what could be theoretically developed for the site under the current General Plan and zoning designations, increases in demand for water supplies associated with buildout of the site would be within the envelope of what has been previously anticipated by the City. In addition, the project design would be required to adhere to State Building Code standards for water conservation, such as low-flow plumbing fixtures, as well as the City's water-conserving guidelines for landscaping, as set forth in Chapter 17.80 of the Municipal Code. Therefore, the proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, and the project would have sufficient water supplies available to serve the project from existing resources.

## *Sewer Service*

The wastewater collection system within the City of Clayton is owned by Clayton and maintained by the City of Concord. Concord has a contract with Central Contra Costa Sanitary District (CCCSD) to treat wastewater. The CCCSD treatment plant currently treats an average of 45 million gallons per day (MGD). The CCCSD treatment plant's permitted physical capacity is 54 MGD. According to the Growth Management Element of the City of Clayton's General Plan, the plant's maximum capacity of 54 MGD is projected to accommodate buildout until the year 2040.<sup>30</sup> Sewer infrastructure to serve the proposed

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<sup>29</sup> Contra Costa Water District. *2015 Urban Water Management Plan for the Contra Costa Water District*. June 2016.

<sup>30</sup> City of Clayton. *City of Clayton General Plan Section XI: Growth Management Element* [page 16]. Available at: <https://ci.clayton.ca.us/community-development/planning/long-range-planning/>. Accessed August 2020. Email communication with Russell B. Leavitt, Engineering Assistant III, Central Contra Costa Sanitary District. May 04, 2016.



project would be extended within the on-site roadway from an existing sewer line located in Mitchell Canyon Road. Specifically, an eight-inch sanitary sewer line would be extended from an existing manhole within Mitchell Canyon Road and routed to the proposed lots.

Given the CCCSD treatment plant's current surplus capacity, and the fact that the project would result in a minimal increase in the demand for wastewater treatment capacity, adequate capacity exists to accommodate the slight increase in sewer demand that would be created by the proposed residential development. Therefore, the proposed project would not exceed treatment requirements of the RWQCB, and the CCCSD would be capable of serving the project's projected demand in addition to the CCCSD's existing commitments.

### *Stormwater Systems*

Development of the proposed project would result in an increase in impervious surfaces on the project site, which would alter the existing drainage pattern of the site. Runoff from Lots #1, #2, and #16 through #18 and pavement from the eastern portion of the new internal roadway would drain to the bio-retention Basin A, east of Lot #1. The western portions of the new internal roadway and Lots #3 through #15, nearer to the open space area, would drain to bio-retention Basin B, located to the west of Lot #7 (see Figure 8). Runoff from undeveloped areas of the project site would remain unchanged and self-treating.

While the proposed project would alter the existing drainage pattern of the development area within the site, as discussed in the Hydrology and Water Quality section of this IS/MND, the project would be required to comply with C.3 Standards and include appropriate site design measures, source controls, and hydraulically-sized stormwater treatment measures. As a result, no net increase in stormwater drainage runoff from the site would be expected. In the absence of an increase in storm water drainage leaving the site, the proposed project would not require the construction of new off-site stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

### *Other Utilities*

Electricity, natural gas, and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. PG&E would provide electricity and natural gas services to the project site. The proposed project would not require major upgrades to, or extension of, existing infrastructure. Thus, impacts to electricity, natural gas, and telecommunications infrastructure would be less than significant.

### *Conclusion*

Based on the above, the project would result in a ***less-than-significant*** impact related to the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

- d. **Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? .....Less-Than-Significant Impact**
- e. **Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? .....Less-Than-Significant Impact**

Discussion (d. and e.)

Solid waste from the City of Clayton is disposed of at Keller Canyon County landfill. Keller Canyon Landfill covers 2,600 acres of land; 244 acres are permitted for disposal. The site currently handles 2,500 tons of waste per day, although the permit for the site allows up to 3,500 tons of waste per day to be managed at the facility. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Keller Canyon Landfill has a remaining capacity of 63,408,410 cubic yards out of a total permitted capacity of 75,018,280 or 85 percent remaining capacity.<sup>31</sup> As such, adequate capacity exists to accommodate the relatively modest amount of waste that would be generated by the 18 proposed single-family residences.

The City is also required by Assembly Bill 939 to ensure that it achieves and maintains the diversion and recycling mandates of the State. Construction of the project would comply with the construction and demolition debris recycling requirements of Chapter 15.80 of the City’s Municipal Code, which requires that a waste management plan be prepared for both demolition and new construction. The waste management plan must address all materials that would not be acceptable for disposal in the sanitary landfill. Therefore, as the project is required to comply with the City’s Municipal Code, and sufficient capacity exists at the Keller Canyon Landfill, implementation of the proposed project would result in a *less-than-significant* impact related to solid waste services.

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<sup>31</sup> California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details: Keller Canyon Landfill (07-AA-0032)*. Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/07-AA-0032>. Accessed August 2020.

**20. WILDFIRE.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>					
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- a. **Substantially impair an adopted emergency response plan or emergency evacuation plan? .....Less-Than-Significant Impact**
- b. **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?.....Less-Than-Significant Impact**
- c. **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?.....Less-Than-Significant Impact**
- d. **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? .....Less-Than-Significant Impact**

Discussion (a., b., c., and d.)

According to the CAL FIRE Fire and Resource Assessment Program, the project site is not located within a state responsibility area or lands classified as a Very High Fire Hazard Severity Zone (VHFHSZ).<sup>32</sup> However, the project site is immediately adjacent to the

<sup>32</sup> California Department of Forestry and Fire Protection. *Contra Costa County, Very High Fire Hazard Severity Zones in LRA*. January 7, 2009.

nearest VHFHSZ along the southern border of the project site. In addition, according to the Diablo Fire Safe Council, the City of Clayton and adjoining communities within a WUI are at significant risk from wildfire. The WUI is defined as an area in which wildlands and communities are sufficiently close to each other to present a credible risk of fire spreading from one to another.<sup>33</sup>

Fire services to the Clayton area are provided by the CCCFPD, with the nearest station to the site located on Center Street, approximately 1.3 miles northeast of the project site. The site is located within the city limits of Clayton, thereby placing the proposed project within the boundaries of the CCCFPD service area. The development of an internal private roadway would provide emergency access to and from the project site. Therefore, the proposed project would be adequately serviced by CCCFPD and would not substantially impair an adopted emergency response plan or emergency evacuation plan, as is previously discussed in Section 9, Hazards and Hazardous Materials, of this IS/MND.

Because the proposed development would be located in proximity to several slopes and open face areas, there are potential risks related to downslope or downstream flooding or landslides on existing and future residents and structures. High levels of stormwater runoff, which may in turn cause slope instability or changes in the site drainage pattern, would threaten the structural stability of the proposed residences or potentially induce landslides. To mitigate the potential impacts, the proposed project would include two on-site bio-retention basins which would capture stormwater runoff generated by new impervious surfaces and would contain enough capacity to treat excess stormwater during extreme weather events. Recommendations included in the Geotechnical Investigation prepared for the project site would effectively mitigate the potential impacts related to downward slopes and flooding, such as the implementation of an engineered retaining system which would include deepened curbs and foundations that are designed to resist lateral earth pressures.

The risk of uncontrolled spread of a wildfire or pollutant concentrations from a wildfire to the project site is further reduced by the proposed project's location near existing development to north, west, and east, which would act as a fire break from potential surrounding wildfires even in the event of strong prevailing winds or extreme weather events. Similarly, development of a portion of the project site from annual grasses, trees, and shrubs to residential land uses may reduce the site's potential fire hazard to surrounding residences. Although the proposed project would include the installation and maintenance of new infrastructure, including roads and utilities lines, the proposed residential units and associated improvements are required to be designed in compliance with all applicable State and local standards and recommendations for new development, such as the CCCFPD's requirements for providing a water supply system for fire protection and providing adequate emergency and fire access. In compliance with the CBC (specifically Section 903.2.1.3, Group A-3), the design of the residences would include automatic fire sprinklers and fire alarm systems. Such features would help to address fire situations within the site, which would reduce the demand for fire protection services. Compliance with the aforementioned statewide and local building standards would ensure that infrastructure improvements would not exacerbate fire risks.

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<sup>33</sup> Diablo Fire Safe Council. *Clayton Morgan Territory Wildfire Action Plan: Public Review Draft*. January 25, 2016.

Therefore, although the project site is located in the vicinity of a VHFHSZ, the proposed project would be compliant with local and State standards ensuring adequate fire protection for new development and would be in close proximity to fire services within the City of Clayton. Based on the above, a *less-than-significant* impact would occur.

**21. MANDATORY FINDINGS OF SIGNIFICANCE.**

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

- a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? .....Less-Than-Significant Impact**

Discussion (a.)

As discussed in Section 4, Biological Resources, of this IS/MND, while a limited potential exists for San Joaquin kit fox, western burrowing owl, golden eagle, white-tailed kite, and birds protected by the MBTA to occur on-site, implementation of Mitigation Measure 1 through Mitigation Measure 6 would ensure that any impacts related to special-status species would be reduced to a less-than-significant level.

In addition, the project site does not contain any known historic or prehistoric resources. Implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic or prehistoric resources. Nevertheless, Mitigation Measure 14 and Mitigation Measure 15 would ensure that in the event that prehistoric resources are discovered within the project site, such resources would be protected in compliance with the requirements of CEQA and other State standards.

Considering the above, the proposed project would not degrade the quality of the environment, substantially reduce or impact the habitat of fish or wildlife species, cause fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, a *less-than-significant* impact would occur.

- b. **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? .....Less-Than-Significant Impact**

Discussion (b.)

The proposed project, in conjunction with other development within the City of Clayton, could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Municipal Code standards, and other applicable local and State regulations.

All cumulative impacts related to air quality, noise, and transportation are either less than significant after mitigation or less than significant and do not require mitigation. Given the scope of the project, any incremental effects would not be considerable relative to the effects of all past, current, and probable future projects. In addition, although the project includes a requested Rezone of the property, residential development of the site has been anticipated, and implementation of the project would result in a slightly less intense development than that which was anticipated in the City's planning documents (i.e., 18 residential units versus 25 units). Thus, the proposed project would not result in greater impacts compared to development of the site under the previously approved densities analyzed in the City's General Plan EIR. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts, and the project's incremental contribution to cumulative impacts would be *less than significant*.

- c. **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? .....Less-Than-Significant Impact**

Discussion (c.)

As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local and State regulations, and mitigation measures included herein. In addition, as discussed in Section 3, Air Quality, Section 7, Geology and Soils, Section 9, Hazards and Hazardous Materials,

and Section 13, Noise, of this IS/MND, the proposed project would not cause substantial effects to human beings, including effects related to exposure to hazardous materials and noise, after mitigation. Therefore, the proposed project would result in a *less-than-significant* impact.



## STAFF AND SOURCES

### Raney:

Cindy Gnos, Senior Vice President  
Nick Pappani, Vice President  
Angela DaRosa, Assistant Division Manager/Air Quality Specialist  
Briette Shea, Associate  
Jessica Chuidian-Ingersoll, Associate

### City of Clayton:

Matthew Feske, Community Development Director  
Christine Gregory, Consulting Planner  
Milan J. Sikela, Jr., Assistant Planner  
Scott Alman, P.E., City Engineer

The following documents are referenced information sources utilized for this analysis:

1. AdvancedGeo. *Phase 1 Environmental Site Assessment: Clayton Trust Property APNs 121-090-011-2 and 121-090-016-1, Clayton, California, Project No. 20-4996*. February 24, 2020.
2. BASIN Research Associates. *Archaeological Resources Review – Mitchell Canyon Road Development, Clayton, Contra Costa County, California*. August 9, 2019.
3. Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2017.
4. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.
5. California Building Standards Commission. *California Green Building Standards Code*. 2019.
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**Appendix A**  
**CalEEMod Modeling Results**

Diablo Meadows Project - Bay Area AQMD Air District, Annual

**Diablo Meadows Project**  
**Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	18.00	Dwelling Unit	3.19	32,400.00	51
Other Asphalt Surfaces	0.74	Acre	0.74	32,234.40	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2023
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	257.69	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Diablo Meadows Project - Bay Area AQMD Air District, Annual

Project Characteristics - Intensity factor for CO2 adjusted based on PG&E's RPS reductions

Land Use - Acreage updated per site plan.

Construction Phase - Phase timing provided by applicant.

Grading - total acres graded adjusted per site plan

Demolition -

Vehicle Trips - trip rate adjusted for ITE trip generation rates 9th edition

Woodstoves - Per AQ questionnaire, no fireplaces proposed

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

## Diablo Meadows Project - Bay Area AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	18.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	8.00	30.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	PhaseEndDate	6/23/2022	7/18/2022
tblConstructionPhase	PhaseEndDate	5/4/2022	7/4/2022
tblConstructionPhase	PhaseEndDate	5/28/2021	5/3/2021
tblConstructionPhase	PhaseEndDate	6/16/2021	6/21/2021
tblConstructionPhase	PhaseEndDate	5/30/2022	7/5/2021
tblConstructionPhase	PhaseEndDate	6/4/2021	5/10/2021
tblConstructionPhase	PhaseStartDate	5/31/2022	7/20/2021
tblConstructionPhase	PhaseStartDate	6/17/2021	7/6/2021
tblConstructionPhase	PhaseStartDate	6/5/2021	5/11/2021
tblConstructionPhase	PhaseStartDate	5/5/2022	6/22/2021
tblConstructionPhase	PhaseStartDate	5/29/2021	5/4/2021
tblFireplaces	NumberGas	4.50	0.00
tblFireplaces	NumberNoFireplace	1.44	18.00
tblFireplaces	NumberWood	7.74	0.00
tblGrading	AcresOfGrading	15.00	3.93
tblLandUse	LotAcreage	5.84	3.19
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	8.62	9.52

Diablo Meadows Project - Bay Area AQMD Air District, Annual

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3025	1.8089	1.5946	2.8300e-003	0.1558	0.0938	0.2496	0.0796	0.0880	0.1676	0.0000	246.4363	246.4363	0.0564	0.0000	247.8450
2022	0.2594	1.1705	1.2437	2.2100e-003	0.0156	0.0589	0.0745	4.2200e-003	0.0558	0.0600	0.0000	191.7993	191.7993	0.0383	0.0000	192.7570
<b>Maximum</b>	<b>0.3025</b>	<b>1.8089</b>	<b>1.5946</b>	<b>2.8300e-003</b>	<b>0.1558</b>	<b>0.0938</b>	<b>0.2496</b>	<b>0.0796</b>	<b>0.0880</b>	<b>0.1676</b>	<b>0.0000</b>	<b>246.4363</b>	<b>246.4363</b>	<b>0.0564</b>	<b>0.0000</b>	<b>247.8450</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3025	1.8089	1.5946	2.8300e-003	0.1558	0.0938	0.2496	0.0796	0.0880	0.1676	0.0000	246.4361	246.4361	0.0564	0.0000	247.8447
2022	0.2594	1.1705	1.2437	2.2100e-003	0.0156	0.0589	0.0745	4.2200e-003	0.0558	0.0600	0.0000	191.7991	191.7991	0.0383	0.0000	192.7568
<b>Maximum</b>	<b>0.3025</b>	<b>1.8089</b>	<b>1.5946</b>	<b>2.8300e-003</b>	<b>0.1558</b>	<b>0.0938</b>	<b>0.2496</b>	<b>0.0796</b>	<b>0.0880</b>	<b>0.1676</b>	<b>0.0000</b>	<b>246.4361</b>	<b>246.4361</b>	<b>0.0564</b>	<b>0.0000</b>	<b>247.8447</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2021	7-31-2021	0.8193	0.8193
2	8-1-2021	10-31-2021	0.7807	0.7807
3	11-1-2021	1-31-2022	0.7569	0.7569
4	2-1-2022	4-30-2022	0.6857	0.6857
5	5-1-2022	7-31-2022	0.5177	0.5177
		Highest	0.8193	0.8193

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1608	2.2300e-003	0.1759	1.4000e-004		7.6300e-003	7.6300e-003		7.6300e-003	7.6300e-003	0.9224	0.2183	1.1408	4.5200e-003	0.0000	1.2538
Energy	2.8200e-003	0.0241	0.0103	1.5000e-004		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	44.9406	44.9406	2.4500e-003	9.1000e-004	45.2725
Mobile	0.0390	0.1726	0.4427	1.6500e-003	0.1473	1.3500e-003	0.1486	0.0395	1.2600e-003	0.0408	0.0000	151.2890	151.2890	5.2500e-003	0.0000	151.4203
Waste						0.0000	0.0000		0.0000	0.0000	4.3481	0.0000	4.3481	0.2570	0.0000	10.7722
Water						0.0000	0.0000		0.0000	0.0000	0.3721	1.0442	1.4163	0.0383	9.3000e-004	2.6507
<b>Total</b>	<b>0.2026</b>	<b>0.1989</b>	<b>0.6289</b>	<b>1.9400e-003</b>	<b>0.1473</b>	<b>0.0109</b>	<b>0.1582</b>	<b>0.0395</b>	<b>0.0108</b>	<b>0.0504</b>	<b>5.6426</b>	<b>197.4921</b>	<b>203.1347</b>	<b>0.3075</b>	<b>1.8400e-003</b>	<b>211.3695</b>



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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1467	1.5400e-003	0.1337	1.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	0.2183	0.2183	2.1000e-004	0.0000	0.2236
Energy	2.6400e-003	0.0226	9.6200e-003	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1763	26.1763	5.0000e-004	4.8000e-004	26.3318
Mobile	0.0382	0.1676	0.4234	1.5600e-003	0.1385	1.2800e-003	0.1398	0.0372	1.1900e-003	0.0384	0.0000	142.9645	142.9645	5.0300e-003	0.0000	143.0902
Waste						0.0000	0.0000		0.0000	0.0000	4.3481	0.0000	4.3481	0.2570	0.0000	10.7722
Water						0.0000	0.0000		0.0000	0.0000	0.2977	0.8959	1.1935	0.0307	7.4000e-004	2.1817
<b>Total</b>	<b>0.1875</b>	<b>0.1917</b>	<b>0.5667</b>	<b>1.7100e-003</b>	<b>0.1385</b>	<b>3.8500e-003</b>	<b>0.1424</b>	<b>0.0372</b>	<b>3.7600e-003</b>	<b>0.0409</b>	<b>4.6457</b>	<b>170.2550</b>	<b>174.9007</b>	<b>0.2934</b>	<b>1.2200e-003</b>	<b>182.5994</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>7.46</b>	<b>3.62</b>	<b>9.88</b>	<b>11.86</b>	<b>5.95</b>	<b>64.78</b>	<b>10.01</b>	<b>5.94</b>	<b>65.31</b>	<b>18.72</b>	<b>17.67</b>	<b>13.79</b>	<b>13.90</b>	<b>4.60</b>	<b>33.70</b>	<b>13.61</b>

**3.0 Construction Detail**

**Construction Phase**

## Diablo Meadows Project - Bay Area AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2021	5/3/2021	5	1	
2	Site Preparation	Site Preparation	5/4/2021	5/10/2021	5	5	
3	Grading	Grading	5/11/2021	6/21/2021	5	30	
4	Building Construction	Building Construction	7/6/2021	7/4/2022	5	260	
5	Paving	Paving	6/22/2021	7/5/2021	5	10	
6	Architectural Coating	Architectural Coating	7/20/2021	7/18/2022	5	260	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 3.93**

**Acres of Paving: 0.74**

**Residential Indoor: 65,610; Residential Outdoor: 21,870; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,934 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Diablo Meadows Project - Bay Area AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Diablo Meadows Project - Bay Area AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.7000e-004	0.0000	1.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
<b>Total</b>	<b>1.5800e-003</b>	<b>0.0157</b>	<b>0.0108</b>	<b>2.0000e-005</b>	<b>1.7000e-004</b>	<b>7.8000e-004</b>	<b>9.5000e-004</b>	<b>3.0000e-005</b>	<b>7.2000e-004</b>	<b>7.5000e-004</b>	<b>0.0000</b>	<b>1.7000</b>	<b>1.7000</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.7120</b>

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**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.7000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0757	0.0757	0.0000	0.0000	0.0758
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0501	0.0501	0.0000	0.0000	0.0501
<b>Total</b>	<b>3.0000e-005</b>	<b>2.9000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1258</b>	<b>0.1258</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1259</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.7000e-004	0.0000	1.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
<b>Total</b>	<b>1.5800e-003</b>	<b>0.0157</b>	<b>0.0108</b>	<b>2.0000e-005</b>	<b>1.7000e-004</b>	<b>7.8000e-004</b>	<b>9.5000e-004</b>	<b>3.0000e-005</b>	<b>7.2000e-004</b>	<b>7.5000e-004</b>	<b>0.0000</b>	<b>1.7000</b>	<b>1.7000</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.7120</b>

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**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.7000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0757	0.0757	0.0000	0.0000	0.0758
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0501	0.0501	0.0000	0.0000	0.0501
<b>Total</b>	<b>3.0000e-005</b>	<b>2.9000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1258</b>	<b>0.1258</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1259</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1012</b>	<b>0.0529</b>	<b>1.0000e-004</b>	<b>0.0452</b>	<b>5.1100e-003</b>	<b>0.0503</b>	<b>0.0248</b>	<b>4.7000e-003</b>	<b>0.0295</b>	<b>0.0000</b>	<b>8.3589</b>	<b>8.3589</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4265</b>

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**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.0000e-004	1.0100e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3006	0.3006	1.0000e-005	0.0000	0.3008
<b>Total</b>	<b>1.4000e-004</b>	<b>1.0000e-004</b>	<b>1.0100e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3006</b>	<b>0.3006</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3008</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1012</b>	<b>0.0529</b>	<b>1.0000e-004</b>	<b>0.0452</b>	<b>5.1100e-003</b>	<b>0.0503</b>	<b>0.0248</b>	<b>4.7000e-003</b>	<b>0.0295</b>	<b>0.0000</b>	<b>8.3589</b>	<b>8.3589</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4265</b>

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**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.0000e-004	1.0100e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3006	0.3006	1.0000e-005	0.0000	0.3008
<b>Total</b>	<b>1.4000e-004</b>	<b>1.0000e-004</b>	<b>1.0100e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3006</b>	<b>0.3006</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3008</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0924	0.0000	0.0924	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0344	0.3711	0.2379	4.4000e-004		0.0174	0.0174		0.0160	0.0160	0.0000	39.0806	39.0806	0.0126	0.0000	39.3965
<b>Total</b>	<b>0.0344</b>	<b>0.3711</b>	<b>0.2379</b>	<b>4.4000e-004</b>	<b>0.0924</b>	<b>0.0174</b>	<b>0.1098</b>	<b>0.0499</b>	<b>0.0160</b>	<b>0.0659</b>	<b>0.0000</b>	<b>39.0806</b>	<b>39.0806</b>	<b>0.0126</b>	<b>0.0000</b>	<b>39.3965</b>



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**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.8000e-004	5.0500e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5030	1.5030	3.0000e-005	0.0000	1.5038
<b>Total</b>	<b>6.9000e-004</b>	<b>4.8000e-004</b>	<b>5.0500e-003</b>	<b>2.0000e-005</b>	<b>1.7800e-003</b>	<b>1.0000e-005</b>	<b>1.7900e-003</b>	<b>4.7000e-004</b>	<b>1.0000e-005</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.5030</b>	<b>1.5030</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.5038</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0924	0.0000	0.0924	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0344	0.3711	0.2379	4.4000e-004		0.0174	0.0174		0.0160	0.0160	0.0000	39.0805	39.0805	0.0126	0.0000	39.3965
<b>Total</b>	<b>0.0344</b>	<b>0.3711</b>	<b>0.2379</b>	<b>4.4000e-004</b>	<b>0.0924</b>	<b>0.0174</b>	<b>0.1098</b>	<b>0.0499</b>	<b>0.0160</b>	<b>0.0659</b>	<b>0.0000</b>	<b>39.0805</b>	<b>39.0805</b>	<b>0.0126</b>	<b>0.0000</b>	<b>39.3965</b>

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**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.8000e-004	5.0500e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5030	1.5030	3.0000e-005	0.0000	1.5038
<b>Total</b>	<b>6.9000e-004</b>	<b>4.8000e-004</b>	<b>5.0500e-003</b>	<b>2.0000e-005</b>	<b>1.7800e-003</b>	<b>1.0000e-005</b>	<b>1.7900e-003</b>	<b>4.7000e-004</b>	<b>1.0000e-005</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.5030</b>	<b>1.5030</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.5038</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1226	1.1244	1.0691	1.7400e-003		0.0618	0.0618		0.0581	0.0581	0.0000	149.4060	149.4060	0.0361	0.0000	150.3072
<b>Total</b>	<b>0.1226</b>	<b>1.1244</b>	<b>1.0691</b>	<b>1.7400e-003</b>		<b>0.0618</b>	<b>0.0618</b>		<b>0.0581</b>	<b>0.0581</b>	<b>0.0000</b>	<b>149.4060</b>	<b>149.4060</b>	<b>0.0361</b>	<b>0.0000</b>	<b>150.3072</b>

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**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4300e-003	0.0472	0.0118	1.2000e-004	2.9600e-003	1.0000e-004	3.0600e-003	8.6000e-004	1.0000e-004	9.5000e-004	0.0000	11.7094	11.7094	5.8000e-004	0.0000	11.7238
Worker	3.9600e-003	2.7300e-003	0.0289	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7100e-003	6.0000e-005	2.7700e-003	0.0000	8.6171	8.6171	1.9000e-004	0.0000	8.6219
<b>Total</b>	<b>5.3900e-003</b>	<b>0.0499</b>	<b>0.0407</b>	<b>2.2000e-004</b>	<b>0.0132</b>	<b>1.7000e-004</b>	<b>0.0133</b>	<b>3.5700e-003</b>	<b>1.6000e-004</b>	<b>3.7200e-003</b>	<b>0.0000</b>	<b>20.3265</b>	<b>20.3265</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>20.3457</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1226	1.1244	1.0691	1.7400e-003		0.0618	0.0618		0.0581	0.0581	0.0000	149.4059	149.4059	0.0361	0.0000	150.3070
<b>Total</b>	<b>0.1226</b>	<b>1.1244</b>	<b>1.0691</b>	<b>1.7400e-003</b>		<b>0.0618</b>	<b>0.0618</b>		<b>0.0581</b>	<b>0.0581</b>	<b>0.0000</b>	<b>149.4059</b>	<b>149.4059</b>	<b>0.0361</b>	<b>0.0000</b>	<b>150.3070</b>

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**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4300e-003	0.0472	0.0118	1.2000e-004	2.9600e-003	1.0000e-004	3.0600e-003	8.6000e-004	1.0000e-004	9.5000e-004	0.0000	11.7094	11.7094	5.8000e-004	0.0000	11.7238
Worker	3.9600e-003	2.7300e-003	0.0289	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7100e-003	6.0000e-005	2.7700e-003	0.0000	8.6171	8.6171	1.9000e-004	0.0000	8.6219
<b>Total</b>	<b>5.3900e-003</b>	<b>0.0499</b>	<b>0.0407</b>	<b>2.2000e-004</b>	<b>0.0132</b>	<b>1.7000e-004</b>	<b>0.0133</b>	<b>3.5700e-003</b>	<b>1.6000e-004</b>	<b>3.7200e-003</b>	<b>0.0000</b>	<b>20.3265</b>	<b>20.3265</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>20.3457</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1118	1.0228	1.0718	1.7600e-003		0.0530	0.0530		0.0499	0.0499	0.0000	151.7800	151.7800	0.0364	0.0000	152.6891
<b>Total</b>	<b>0.1118</b>	<b>1.0228</b>	<b>1.0718</b>	<b>1.7600e-003</b>		<b>0.0530</b>	<b>0.0530</b>		<b>0.0499</b>	<b>0.0499</b>	<b>0.0000</b>	<b>151.7800</b>	<b>151.7800</b>	<b>0.0364</b>	<b>0.0000</b>	<b>152.6891</b>

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**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3600e-003	0.0454	0.0112	1.2000e-004	3.0100e-003	9.0000e-005	3.1000e-003	8.7000e-004	9.0000e-005	9.6000e-004	0.0000	11.7743	11.7743	5.6000e-004	0.0000	11.7883
Worker	3.7500e-003	2.4900e-003	0.0270	9.0000e-005	0.0104	7.0000e-005	0.0104	2.7500e-003	6.0000e-005	2.8100e-003	0.0000	8.4299	8.4299	1.8000e-004	0.0000	8.4343
<b>Total</b>	<b>5.1100e-003</b>	<b>0.0478</b>	<b>0.0382</b>	<b>2.1000e-004</b>	<b>0.0134</b>	<b>1.6000e-004</b>	<b>0.0135</b>	<b>3.6200e-003</b>	<b>1.5000e-004</b>	<b>3.7700e-003</b>	<b>0.0000</b>	<b>20.2042</b>	<b>20.2042</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>20.2226</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1118	1.0228	1.0718	1.7600e-003		0.0530	0.0530		0.0499	0.0499	0.0000	151.7799	151.7799	0.0364	0.0000	152.6889
<b>Total</b>	<b>0.1118</b>	<b>1.0228</b>	<b>1.0718</b>	<b>1.7600e-003</b>		<b>0.0530</b>	<b>0.0530</b>		<b>0.0499</b>	<b>0.0499</b>	<b>0.0000</b>	<b>151.7799</b>	<b>151.7799</b>	<b>0.0364</b>	<b>0.0000</b>	<b>152.6889</b>

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**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3600e-003	0.0454	0.0112	1.2000e-004	3.0100e-003	9.0000e-005	3.1000e-003	8.7000e-004	9.0000e-005	9.6000e-004	0.0000	11.7743	11.7743	5.6000e-004	0.0000	11.7883
Worker	3.7500e-003	2.4900e-003	0.0270	9.0000e-005	0.0104	7.0000e-005	0.0104	2.7500e-003	6.0000e-005	2.8100e-003	0.0000	8.4299	8.4299	1.8000e-004	0.0000	8.4343
<b>Total</b>	<b>5.1100e-003</b>	<b>0.0478</b>	<b>0.0382</b>	<b>2.1000e-004</b>	<b>0.0134</b>	<b>1.6000e-004</b>	<b>0.0135</b>	<b>3.6200e-003</b>	<b>1.5000e-004</b>	<b>3.7700e-003</b>	<b>0.0000</b>	<b>20.2042</b>	<b>20.2042</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>20.2226</b>

**3.6 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.4700e-003	0.0542	0.0613	9.0000e-005		2.8900e-003	2.8900e-003		2.6700e-003	2.6700e-003	0.0000	8.1853	8.1853	2.5700e-003	0.0000	8.2496
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.4400e-003</b>	<b>0.0542</b>	<b>0.0613</b>	<b>9.0000e-005</b>		<b>2.8900e-003</b>	<b>2.8900e-003</b>		<b>2.6700e-003</b>	<b>2.6700e-003</b>	<b>0.0000</b>	<b>8.1853</b>	<b>8.1853</b>	<b>2.5700e-003</b>	<b>0.0000</b>	<b>8.2496</b>

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**3.6 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.2400e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6680	0.6680	1.0000e-005	0.0000	0.6684
<b>Total</b>	<b>3.1000e-004</b>	<b>2.1000e-004</b>	<b>2.2400e-003</b>	<b>1.0000e-005</b>	<b>7.9000e-004</b>	<b>1.0000e-005</b>	<b>8.0000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6680</b>	<b>0.6680</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.6684</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.4700e-003	0.0542	0.0613	9.0000e-005		2.8900e-003	2.8900e-003		2.6700e-003	2.6700e-003	0.0000	8.1853	8.1853	2.5700e-003	0.0000	8.2496
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.4400e-003</b>	<b>0.0542</b>	<b>0.0613</b>	<b>9.0000e-005</b>		<b>2.8900e-003</b>	<b>2.8900e-003</b>		<b>2.6700e-003</b>	<b>2.6700e-003</b>	<b>0.0000</b>	<b>8.1853</b>	<b>8.1853</b>	<b>2.5700e-003</b>	<b>0.0000</b>	<b>8.2496</b>

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**3.6 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.2400e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6680	0.6680	1.0000e-005	0.0000	0.6684
<b>Total</b>	<b>3.1000e-004</b>	<b>2.1000e-004</b>	<b>2.2400e-003</b>	<b>1.0000e-005</b>	<b>7.9000e-004</b>	<b>1.0000e-005</b>	<b>8.0000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6680</b>	<b>0.6680</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.6684</b>

**3.7 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1075					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0130	0.0909	0.1081	1.8000e-004		5.6000e-003	5.6000e-003		5.6000e-003	5.6000e-003	0.0000	15.1919	15.1919	1.0400e-003	0.0000	15.2179
<b>Total</b>	<b>0.1205</b>	<b>0.0909</b>	<b>0.1081</b>	<b>1.8000e-004</b>		<b>5.6000e-003</b>	<b>5.6000e-003</b>		<b>5.6000e-003</b>	<b>5.6000e-003</b>	<b>0.0000</b>	<b>15.1919</b>	<b>15.1919</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>15.2179</b>



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**3.7 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	5.0000e-004	5.3400e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5898	1.5898	4.0000e-005	0.0000	1.5907
<b>Total</b>	<b>7.3000e-004</b>	<b>5.0000e-004</b>	<b>5.3400e-003</b>	<b>2.0000e-005</b>	<b>1.8800e-003</b>	<b>1.0000e-005</b>	<b>1.8900e-003</b>	<b>5.0000e-004</b>	<b>1.0000e-005</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>1.5898</b>	<b>1.5898</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.5907</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1075					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0130	0.0909	0.1081	1.8000e-004		5.6000e-003	5.6000e-003		5.6000e-003	5.6000e-003	0.0000	15.1918	15.1918	1.0400e-003	0.0000	15.2179
<b>Total</b>	<b>0.1205</b>	<b>0.0909</b>	<b>0.1081</b>	<b>1.8000e-004</b>		<b>5.6000e-003</b>	<b>5.6000e-003</b>		<b>5.6000e-003</b>	<b>5.6000e-003</b>	<b>0.0000</b>	<b>15.1918</b>	<b>15.1918</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>15.2179</b>

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**3.7 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	5.0000e-004	5.3400e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5898	1.5898	4.0000e-005	0.0000	1.5907
<b>Total</b>	<b>7.3000e-004</b>	<b>5.0000e-004</b>	<b>5.3400e-003</b>	<b>2.0000e-005</b>	<b>1.8800e-003</b>	<b>1.0000e-005</b>	<b>1.8900e-003</b>	<b>5.0000e-004</b>	<b>1.0000e-005</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>1.5898</b>	<b>1.5898</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.5907</b>

**3.7 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.0993	0.1279	2.1000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	18.0004	18.0004	1.1700e-003	0.0000	18.0297
<b>Total</b>	<b>0.1418</b>	<b>0.0993</b>	<b>0.1279</b>	<b>2.1000e-004</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>	<b>0.0000</b>	<b>18.0004</b>	<b>18.0004</b>	<b>1.1700e-003</b>	<b>0.0000</b>	<b>18.0297</b>

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**3.7 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.4000e-004	5.8100e-003	2.0000e-005	2.2300e-003	1.0000e-005	2.2400e-003	5.9000e-004	1.0000e-005	6.1000e-004	0.0000	1.8147	1.8147	4.0000e-005	0.0000	1.8156
<b>Total</b>	<b>8.1000e-004</b>	<b>5.4000e-004</b>	<b>5.8100e-003</b>	<b>2.0000e-005</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>2.2400e-003</b>	<b>5.9000e-004</b>	<b>1.0000e-005</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>1.8147</b>	<b>1.8147</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.8156</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.0993	0.1279	2.1000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	18.0004	18.0004	1.1700e-003	0.0000	18.0297
<b>Total</b>	<b>0.1418</b>	<b>0.0993</b>	<b>0.1279</b>	<b>2.1000e-004</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>	<b>0.0000</b>	<b>18.0004</b>	<b>18.0004</b>	<b>1.1700e-003</b>	<b>0.0000</b>	<b>18.0297</b>

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**3.7 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.4000e-004	5.8100e-003	2.0000e-005	2.2300e-003	1.0000e-005	2.2400e-003	5.9000e-004	1.0000e-005	6.1000e-004	0.0000	1.8147	1.8147	4.0000e-005	0.0000	1.8156
<b>Total</b>	<b>8.1000e-004</b>	<b>5.4000e-004</b>	<b>5.8100e-003</b>	<b>2.0000e-005</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>2.2400e-003</b>	<b>5.9000e-004</b>	<b>1.0000e-005</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>1.8147</b>	<b>1.8147</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.8156</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0382	0.1676	0.4234	1.5600e-003	0.1385	1.2800e-003	0.1398	0.0372	1.1900e-003	0.0384	0.0000	142.9645	142.9645	5.0300e-003	0.0000	143.0902
Unmitigated	0.0390	0.1726	0.4427	1.6500e-003	0.1473	1.3500e-003	0.1486	0.0395	1.2600e-003	0.0408	0.0000	151.2890	151.2890	5.2500e-003	0.0000	151.4203

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	171.36	171.36	171.36	395,774	372,226
Total	171.36	171.36	171.36	395,774	372,226

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Single Family Housing	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

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**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	17.0222	17.0222	1.9200e-003	4.0000e-004	17.1882
NaturalGas Mitigated	2.6400e-003	0.0226	9.6200e-003	1.4000e-004			1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1763	26.1763	5.0000e-004	4.8000e-004	26.3318
NaturalGas Unmitigated	2.8200e-003	0.0241	0.0103	1.5000e-004			1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	27.9184	27.9184	5.4000e-004	5.1000e-004	28.0843

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	523172	2.8200e-003	0.0241	0.0103	1.5000e-004		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	27.9184	27.9184	5.4000e-004	5.1000e-004	28.0843
<b>Total</b>		<b>2.8200e-003</b>	<b>0.0241</b>	<b>0.0103</b>	<b>1.5000e-004</b>		<b>1.9500e-003</b>	<b>1.9500e-003</b>		<b>1.9500e-003</b>	<b>1.9500e-003</b>	<b>0.0000</b>	<b>27.9184</b>	<b>27.9184</b>	<b>5.4000e-004</b>	<b>5.1000e-004</b>	<b>28.0843</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	490525	2.6400e-003	0.0226	9.6200e-003	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1763	26.1763	5.0000e-004	4.8000e-004	26.3318
<b>Total</b>		<b>2.6400e-003</b>	<b>0.0226</b>	<b>9.6200e-003</b>	<b>1.4000e-004</b>		<b>1.8300e-003</b>	<b>1.8300e-003</b>		<b>1.8300e-003</b>	<b>1.8300e-003</b>	<b>0.0000</b>	<b>26.1763</b>	<b>26.1763</b>	<b>5.0000e-004</b>	<b>4.8000e-004</b>	<b>26.3318</b>

Diablo Meadows Project - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	145630	17.0222	1.9200e-003	4.0000e-004	17.1882
<b>Total</b>		<b>17.0222</b>	<b>1.9200e-003</b>	<b>4.0000e-004</b>	<b>17.1882</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



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Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1467	1.5400e-003	0.1337	1.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	0.2183	0.2183	2.1000e-004	0.0000	0.2236
Unmitigated	0.1608	2.2300e-003	0.1759	1.4000e-004		7.6300e-003	7.6300e-003		7.6300e-003	7.6300e-003	0.9224	0.2183	1.1408	4.5200e-003	0.0000	1.2538

Diablo Meadows Project - Bay Area AQMD Air District, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0235					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1286					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.6500e-003	6.9000e-004	0.0422	1.4000e-004		6.8900e-003	6.8900e-003		6.8900e-003	6.8900e-003	0.9224	0.0000	0.9224	4.3100e-003	0.0000	1.0302
Landscaping	4.0300e-003	1.5400e-003	0.1337	1.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	0.2183	0.2183	2.1000e-004	0.0000	0.2236
<b>Total</b>	<b>0.1608</b>	<b>2.2300e-003</b>	<b>0.1759</b>	<b>1.5000e-004</b>		<b>7.6300e-003</b>	<b>7.6300e-003</b>		<b>7.6300e-003</b>	<b>7.6300e-003</b>	<b>0.9224</b>	<b>0.2183</b>	<b>1.1408</b>	<b>4.5200e-003</b>	<b>0.0000</b>	<b>1.2538</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0235					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1192					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0300e-003	1.5400e-003	0.1337	1.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	0.2183	0.2183	2.1000e-004	0.0000	0.2236
<b>Total</b>	<b>0.1467</b>	<b>1.5400e-003</b>	<b>0.1337</b>	<b>1.0000e-005</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.2183</b>	<b>0.2183</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.2236</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

Diablo Meadows Project - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.1935	0.0307	7.4000e-004	2.1817
Unmitigated	1.4163	0.0383	9.3000e-004	2.6507

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.17277 / 0.739357	1.4163	0.0383	9.3000e-004	2.6507
<b>Total</b>		<b>1.4163</b>	<b>0.0383</b>	<b>9.3000e-004</b>	<b>2.6507</b>

Diablo Meadows Project - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.938218 / 0.739357	1.1935	0.0307	7.4000e-004	2.1817
<b>Total</b>		<b>1.1935</b>	<b>0.0307</b>	<b>7.4000e-004</b>	<b>2.1817</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.3481	0.2570	0.0000	10.7722
Unmitigated	4.3481	0.2570	0.0000	10.7722

Diablo Meadows Project - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	21.42	4.3481	0.2570	0.0000	10.7722
<b>Total</b>		<b>4.3481</b>	<b>0.2570</b>	<b>0.0000</b>	<b>10.7722</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	21.42	4.3481	0.2570	0.0000	10.7722
<b>Total</b>		<b>4.3481</b>	<b>0.2570</b>	<b>0.0000</b>	<b>10.7722</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Diablo Meadows Project - Bay Area AQMD Air District, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Diablo Meadows Project - Bay Area AQMD Air District, Summer

**Diablo Meadows Project**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	18.00	Dwelling Unit	3.19	32,400.00	51
Other Asphalt Surfaces	0.74	Acre	0.74	32,234.40	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2023
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	257.69	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



Diablo Meadows Project - Bay Area AQMD Air District, Summer

Project Characteristics - Intensity factor for CO2 adjusted based on PG&E's RPS reductions

Land Use - Acreage updated per site plan.

Construction Phase - Phase timing provided by applicant.

Grading - total acres graded adjusted per site plan

Demolition -

Vehicle Trips - trip rate adjusted for ITE trip generation rates 9th edition

Woodstoves - Per AQ questionnaire, no fireplaces proposed

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

## Diablo Meadows Project - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	18.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	8.00	30.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	PhaseEndDate	6/23/2022	7/18/2022
tblConstructionPhase	PhaseEndDate	5/4/2022	7/4/2022
tblConstructionPhase	PhaseEndDate	5/28/2021	5/3/2021
tblConstructionPhase	PhaseEndDate	6/16/2021	6/21/2021
tblConstructionPhase	PhaseEndDate	5/30/2022	7/5/2021
tblConstructionPhase	PhaseEndDate	6/4/2021	5/10/2021
tblConstructionPhase	PhaseStartDate	5/31/2022	7/20/2021
tblConstructionPhase	PhaseStartDate	6/17/2021	7/6/2021
tblConstructionPhase	PhaseStartDate	6/5/2021	5/11/2021
tblConstructionPhase	PhaseStartDate	5/5/2022	6/22/2021
tblConstructionPhase	PhaseStartDate	5/29/2021	5/4/2021
tblFireplaces	NumberGas	4.50	0.00
tblFireplaces	NumberNoFireplace	1.44	18.00
tblFireplaces	NumberWood	7.74	0.00
tblGrading	AcresOfGrading	15.00	3.93
tblLandUse	LotAcreage	5.84	3.19
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	8.62	9.52

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0249	40.5309	22.0450	0.0416	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,034.7208	4,034.7208	1.1952	0.0000	4,061.3680
2022	3.8090	17.7502	18.8806	0.0336	0.2446	0.8933	1.1378	0.0659	0.8453	0.9112	0.0000	3,219.1777	3,219.1777	0.6432	0.0000	3,235.2567
<b>Maximum</b>	<b>4.0249</b>	<b>40.5309</b>	<b>22.0450</b>	<b>0.0416</b>	<b>18.2141</b>	<b>2.0454</b>	<b>20.2595</b>	<b>9.9699</b>	<b>1.8818</b>	<b>11.8517</b>	<b>0.0000</b>	<b>4,034.7208</b>	<b>4,034.7208</b>	<b>1.1952</b>	<b>0.0000</b>	<b>4,061.3680</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0249	40.5309	22.0450	0.0416	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,034.7208	4,034.7208	1.1952	0.0000	4,061.3680
2022	3.8090	17.7502	18.8806	0.0336	0.2446	0.8933	1.1378	0.0659	0.8453	0.9112	0.0000	3,219.1777	3,219.1777	0.6432	0.0000	3,235.2567
<b>Maximum</b>	<b>4.0249</b>	<b>40.5309</b>	<b>22.0450</b>	<b>0.0416</b>	<b>18.2141</b>	<b>2.0454</b>	<b>20.2595</b>	<b>9.9699</b>	<b>1.8818</b>	<b>11.8517</b>	<b>0.0000</b>	<b>4,034.7208</b>	<b>4,034.7208</b>	<b>1.1952</b>	<b>0.0000</b>	<b>4,061.3680</b>



Diablo Meadows Project - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3198	0.0825	5.4958	0.0132		0.6624	0.6624		0.6624	0.6624	96.5632	2.6741	99.2373	0.4540	0.0000	110.5869
Energy	0.0155	0.1321	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.6291	168.6291	3.2300e-003	3.0900e-003	169.6311
Mobile	0.2464	0.9194	2.5332	9.5700e-003	0.8408	7.4000e-003	0.8482	0.2249	6.9100e-003	0.2318		969.1667	969.1667	0.0320		969.9671
<b>Total</b>	<b>1.5816</b>	<b>1.1340</b>	<b>8.0852</b>	<b>0.0236</b>	<b>0.8408</b>	<b>0.6805</b>	<b>1.5213</b>	<b>0.2249</b>	<b>0.6800</b>	<b>0.9050</b>	<b>96.5632</b>	<b>1,140.4698</b>	<b>1,237.0330</b>	<b>0.4892</b>	<b>3.0900e-003</b>	<b>1,250.1852</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8264	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003	0.0000	2.6741	2.6741	2.5700e-003	0.0000	2.7384
Energy	0.0145	0.1239	0.0527	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1063	158.1063	3.0300e-003	2.9000e-003	159.0459
Mobile	0.2418	0.8937	2.4136	9.0500e-003	0.7907	7.0200e-003	0.7978	0.2115	6.5500e-003	0.2181		915.7669	915.7669	0.0306		916.5315
<b>Total</b>	<b>1.0826</b>	<b>1.0346</b>	<b>3.9517</b>	<b>9.9200e-003</b>	<b>0.7907</b>	<b>0.0253</b>	<b>0.8160</b>	<b>0.2115</b>	<b>0.0248</b>	<b>0.2363</b>	<b>0.0000</b>	<b>1,076.5473</b>	<b>1,076.5473</b>	<b>0.0362</b>	<b>2.9000e-003</b>	<b>1,078.3158</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	31.55	8.77	51.12	57.91	5.95	96.29	46.36	5.95	96.36	73.89	100.00	5.60	12.97	92.60	6.15	13.75

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2021	5/3/2021	5	1	
2	Site Preparation	Site Preparation	5/4/2021	5/10/2021	5	5	
3	Grading	Grading	5/11/2021	6/21/2021	5	30	
4	Building Construction	Building Construction	7/6/2021	7/4/2022	5	260	
5	Paving	Paving	6/22/2021	7/5/2021	5	10	
6	Architectural Coating	Architectural Coating	7/20/2021	7/18/2022	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3.93

Acres of Paving: 0.74

Residential Indoor: 65,610; Residential Outdoor: 21,870; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,934 (Architectural Coating – sqft)

#### OffRoad Equipment

## Diablo Meadows Project - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Diablo Meadows Project - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3445	0.0000	0.3445	0.0522	0.0000	0.0522			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>0.3445</b>	<b>1.5513</b>	<b>1.8959</b>	<b>0.0522</b>	<b>1.4411</b>	<b>1.4933</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>



Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0156	0.5292	0.1116	1.5700e-003	0.0349	1.6600e-003	0.0366	9.5800e-003	1.5900e-003	0.0112		167.9819	167.9819	8.3400e-003		168.1903
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0482	0.0282	0.3685	1.1900e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.7939	118.7939	2.6600e-003		118.8603
<b>Total</b>	<b>0.0638</b>	<b>0.5574</b>	<b>0.4800</b>	<b>2.7600e-003</b>	<b>0.1582</b>	<b>2.4400e-003</b>	<b>0.1606</b>	<b>0.0423</b>	<b>2.3000e-003</b>	<b>0.0446</b>		<b>286.7759</b>	<b>286.7759</b>	<b>0.0110</b>		<b>287.0507</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3445	0.0000	0.3445	0.0522	0.0000	0.0522			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>0.3445</b>	<b>1.5513</b>	<b>1.8959</b>	<b>0.0522</b>	<b>1.4411</b>	<b>1.4933</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0156	0.5292	0.1116	1.5700e-003	0.0349	1.6600e-003	0.0366	9.5800e-003	1.5900e-003	0.0112		167.9819	167.9819	8.3400e-003		168.1903
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0482	0.0282	0.3685	1.1900e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.7939	118.7939	2.6600e-003		118.8603
<b>Total</b>	<b>0.0638</b>	<b>0.5574</b>	<b>0.4800</b>	<b>2.7600e-003</b>	<b>0.1582</b>	<b>2.4400e-003</b>	<b>0.1606</b>	<b>0.0423</b>	<b>2.3000e-003</b>	<b>0.0446</b>		<b>286.7759</b>	<b>286.7759</b>	<b>0.0110</b>		<b>287.0507</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0579	0.0338	0.4421	1.4300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		142.5527	142.5527	3.1900e-003		142.6324
<b>Total</b>	<b>0.0579</b>	<b>0.0338</b>	<b>0.4421</b>	<b>1.4300e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>142.5527</b>	<b>142.5527</b>	<b>3.1900e-003</b>		<b>142.6324</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0579	0.0338	0.4421	1.4300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		142.5527	142.5527	3.1900e-003		142.6324
<b>Total</b>	<b>0.0579</b>	<b>0.0338</b>	<b>0.4421</b>	<b>1.4300e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>142.5527</b>	<b>142.5527</b>	<b>3.1900e-003</b>		<b>142.6324</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1610	0.0000	6.1610	3.3252	0.0000	3.3252			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.1610</b>	<b>1.1599</b>	<b>7.3209</b>	<b>3.3252</b>	<b>1.0671</b>	<b>4.3924</b>		<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895.1495</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0482	0.0282	0.3685	1.1900e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.7939	118.7939	2.6600e-003		118.8603
<b>Total</b>	<b>0.0482</b>	<b>0.0282</b>	<b>0.3685</b>	<b>1.1900e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>118.7939</b>	<b>118.7939</b>	<b>2.6600e-003</b>		<b>118.8603</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1610	0.0000	6.1610	3.3252	0.0000	3.3252			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.1610</b>	<b>1.1599</b>	<b>7.3209</b>	<b>3.3252</b>	<b>1.0671</b>	<b>4.3924</b>	<b>0.0000</b>	<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895,1495</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0482	0.0282	0.3685	1.1900e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.7939	118.7939	2.6600e-003		118.8603
<b>Total</b>	<b>0.0482</b>	<b>0.0282</b>	<b>0.3685</b>	<b>1.1900e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>118.7939</b>	<b>118.7939</b>	<b>2.6600e-003</b>		<b>118.8603</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0217	0.7234	0.1706	1.9100e-003	0.0474	1.5700e-003	0.0490	0.0136	1.5000e-003	0.0151		202.2710	202.2710	9.4900e-003		202.5083
Worker	0.0643	0.0376	0.4913	1.5900e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		158.3919	158.3919	3.5400e-003		158.4804
<b>Total</b>	<b>0.0860</b>	<b>0.7610</b>	<b>0.6618</b>	<b>3.5000e-003</b>	<b>0.2117</b>	<b>2.6000e-003</b>	<b>0.2143</b>	<b>0.0572</b>	<b>2.4500e-003</b>	<b>0.0597</b>		<b>360.6629</b>	<b>360.6629</b>	<b>0.0130</b>		<b>360.9887</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0217	0.7234	0.1706	1.9100e-003	0.0474	1.5700e-003	0.0490	0.0136	1.5000e-003	0.0151		202.2710	202.2710	9.4900e-003		202.5083
Worker	0.0643	0.0376	0.4913	1.5900e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		158.3919	158.3919	3.5400e-003		158.4804
<b>Total</b>	<b>0.0860</b>	<b>0.7610</b>	<b>0.6618</b>	<b>3.5000e-003</b>	<b>0.2117</b>	<b>2.6000e-003</b>	<b>0.2143</b>	<b>0.0572</b>	<b>2.4500e-003</b>	<b>0.0597</b>		<b>360.6629</b>	<b>360.6629</b>	<b>0.0130</b>		<b>360.9887</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>



Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0203	0.6856	0.1604	1.8900e-003	0.0474	1.3600e-003	0.0487	0.0136	1.3000e-003	0.0149		200.3012	200.3012	9.0800e-003		200.5281
Worker	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586
<b>Total</b>	<b>0.0801</b>	<b>0.7193</b>	<b>0.6131</b>	<b>3.4200e-003</b>	<b>0.2117</b>	<b>2.3700e-003</b>	<b>0.2140</b>	<b>0.0572</b>	<b>2.2300e-003</b>	<b>0.0595</b>		<b>352.8802</b>	<b>352.8802</b>	<b>0.0123</b>		<b>353.1866</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0203	0.6856	0.1604	1.8900e-003	0.0474	1.3600e-003	0.0487	0.0136	1.3000e-003	0.0149		200.3012	200.3012	9.0800e-003		200.5281
Worker	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586
<b>Total</b>	<b>0.0801</b>	<b>0.7193</b>	<b>0.6131</b>	<b>3.4200e-003</b>	<b>0.2117</b>	<b>2.3700e-003</b>	<b>0.2140</b>	<b>0.0572</b>	<b>2.2300e-003</b>	<b>0.0595</b>		<b>352.8802</b>	<b>352.8802</b>	<b>0.0123</b>		<b>353.1866</b>

**3.6 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342		1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2878</b>	<b>10.8399</b>	<b>12.2603</b>	<b>0.0189</b>		<b>0.5788</b>	<b>0.5788</b>		<b>0.5342</b>	<b>0.5342</b>		<b>1,804.5523</b>	<b>1,804.5523</b>	<b>0.5670</b>		<b>1,818.7270</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.6 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0376	0.4913	1.5900e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		158.3919	158.3919	3.5400e-003		158.4804
<b>Total</b>	<b>0.0643</b>	<b>0.0376</b>	<b>0.4913</b>	<b>1.5900e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>158.3919</b>	<b>158.3919</b>	<b>3.5400e-003</b>		<b>158.4804</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342	0.0000	1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2878</b>	<b>10.8399</b>	<b>12.2603</b>	<b>0.0189</b>		<b>0.5788</b>	<b>0.5788</b>		<b>0.5342</b>	<b>0.5342</b>	<b>0.0000</b>	<b>1,804.5523</b>	<b>1,804.5523</b>	<b>0.5670</b>		<b>1,818.7270</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.6 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0376	0.4913	1.5900e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		158.3919	158.3919	3.5400e-003		158.4804
<b>Total</b>	<b>0.0643</b>	<b>0.0376</b>	<b>0.4913</b>	<b>1.5900e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>158.3919</b>	<b>158.3919</b>	<b>3.5400e-003</b>		<b>158.4804</b>

**3.7 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>2.0251</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0129	7.5200e-003	0.0983	3.2000e-004	0.0329	2.1000e-004	0.0331	8.7200e-003	1.9000e-004	8.9100e-003		31.6784	31.6784	7.1000e-004		31.6961
<b>Total</b>	<b>0.0129</b>	<b>7.5200e-003</b>	<b>0.0983</b>	<b>3.2000e-004</b>	<b>0.0329</b>	<b>2.1000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9100e-003</b>		<b>31.6784</b>	<b>31.6784</b>	<b>7.1000e-004</b>		<b>31.6961</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>2.0251</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0129	7.5200e-003	0.0983	3.2000e-004	0.0329	2.1000e-004	0.0331	8.7200e-003	1.9000e-004	8.9100e-003		31.6784	31.6784	7.1000e-004		31.6961
<b>Total</b>	<b>0.0129</b>	<b>7.5200e-003</b>	<b>0.0983</b>	<b>3.2000e-004</b>	<b>0.0329</b>	<b>2.1000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9100e-003</b>		<b>31.6784</b>	<b>31.6784</b>	<b>7.1000e-004</b>		<b>31.6961</b>

**3.7 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>2.0107</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0120	6.7400e-003	0.0905	3.1000e-004	0.0329	2.0000e-004	0.0331	8.7200e-003	1.9000e-004	8.9000e-003		30.5158	30.5158	6.4000e-004		30.5317
<b>Total</b>	<b>0.0120</b>	<b>6.7400e-003</b>	<b>0.0905</b>	<b>3.1000e-004</b>	<b>0.0329</b>	<b>2.0000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9000e-003</b>		<b>30.5158</b>	<b>30.5158</b>	<b>6.4000e-004</b>		<b>30.5317</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>2.0107</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0120	6.7400e-003	0.0905	3.1000e-004	0.0329	2.0000e-004	0.0331	8.7200e-003	1.9000e-004	8.9000e-003		30.5158	30.5158	6.4000e-004		30.5317
<b>Total</b>	<b>0.0120</b>	<b>6.7400e-003</b>	<b>0.0905</b>	<b>3.1000e-004</b>	<b>0.0329</b>	<b>2.0000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9000e-003</b>		<b>30.5158</b>	<b>30.5158</b>	<b>6.4000e-004</b>		<b>30.5317</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network



Diablo Meadows Project - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2418	0.8937	2.4136	9.0500e-003	0.7907	7.0200e-003	0.7978	0.2115	6.5500e-003	0.2181		915.7669	915.7669	0.0306		916.5315
Unmitigated	0.2464	0.9194	2.5332	9.5700e-003	0.8408	7.4000e-003	0.8482	0.2249	6.9100e-003	0.2318		969.1667	969.1667	0.0320		969.9671

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	171.36	171.36	171.36	395,774	372,226
Total	171.36	171.36	171.36	395,774	372,226

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Single Family Housing	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0145	0.1239	0.0527	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1063	158.1063	3.0300e-003	2.9000e-003	159.0459
NaturalGas Unmitigated	0.0155	0.1321	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.6291	168.6291	3.2300e-003	3.0900e-003	169.6311

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1433.35	0.0155	0.1321	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.6291	168.6291	3.2300e-003	3.0900e-003	169.6311
<b>Total</b>		<b>0.0155</b>	<b>0.1321</b>	<b>0.0562</b>	<b>8.4000e-004</b>		<b>0.0107</b>	<b>0.0107</b>		<b>0.0107</b>	<b>0.0107</b>		<b>168.6291</b>	<b>168.6291</b>	<b>3.2300e-003</b>	<b>3.0900e-003</b>	<b>169.6311</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.3439	0.0145	0.1239	0.0527	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1063	158.1063	3.0300e-003	2.9000e-003	159.0459
<b>Total</b>		<b>0.0145</b>	<b>0.1239</b>	<b>0.0527</b>	<b>7.9000e-004</b>		<b>0.0100</b>	<b>0.0100</b>		<b>0.0100</b>	<b>0.0100</b>		<b>158.1063</b>	<b>158.1063</b>	<b>3.0300e-003</b>	<b>2.9000e-003</b>	<b>159.0459</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Diablo Meadows Project - Bay Area AQMD Air District, Summer

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8264	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003	0.0000	2.6741	2.6741	2.5700e-003	0.0000	2.7384
Unmitigated	1.3198	0.0825	5.4958	0.0132		0.6624	0.6624		0.6624	0.6624	96.5632	2.6741	99.2373	0.4540	0.0000	110.5869

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7048					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4416	0.0654	4.0104	0.0131		0.6542	0.6542		0.6542	0.6542	96.5632	0.0000	96.5632	0.4514	0.0000	107.8485
Landscaping	0.0448	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003		2.6741	2.6741	2.5700e-003		2.7384
<b>Total</b>	<b>1.3198</b>	<b>0.0825</b>	<b>5.4958</b>	<b>0.0132</b>		<b>0.6624</b>	<b>0.6624</b>		<b>0.6624</b>	<b>0.6624</b>	<b>96.5632</b>	<b>2.6741</b>	<b>99.2373</b>	<b>0.4540</b>	<b>0.0000</b>	<b>110.5869</b>

Diablo Meadows Project - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6529					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0448	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003		2.6741	2.6741	2.5700e-003		2.7384
<b>Total</b>	<b>0.8264</b>	<b>0.0171</b>	<b>1.4854</b>	<b>8.0000e-005</b>		<b>8.2200e-003</b>	<b>8.2200e-003</b>		<b>8.2200e-003</b>	<b>8.2200e-003</b>	<b>0.0000</b>	<b>2.6741</b>	<b>2.6741</b>	<b>2.5700e-003</b>	<b>0.0000</b>	<b>2.7384</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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## Diablo Meadows Project - Bay Area AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Diablo Meadows Project - Bay Area AQMD Air District, Winter

**Diablo Meadows Project**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	18.00	Dwelling Unit	3.19	32,400.00	51
Other Asphalt Surfaces	0.74	Acre	0.74	32,234.40	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2023
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	257.69	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



Diablo Meadows Project - Bay Area AQMD Air District, Winter

Project Characteristics - Intensity factor for CO2 adjusted based on PG&E's RPS reductions

Land Use - Acreage updated per site plan.

Construction Phase - Phase timing provided by applicant.

Grading - total acres graded adjusted per site plan

Demolition -

Vehicle Trips - trip rate adjusted for ITE trip generation rates 9th edition

Woodstoves - Per AQ questionnaire, no fireplaces proposed

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

## Diablo Meadows Project - Bay Area AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	18.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	8.00	30.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	PhaseEndDate	6/23/2022	7/18/2022
tblConstructionPhase	PhaseEndDate	5/4/2022	7/4/2022
tblConstructionPhase	PhaseEndDate	5/28/2021	5/3/2021
tblConstructionPhase	PhaseEndDate	6/16/2021	6/21/2021
tblConstructionPhase	PhaseEndDate	5/30/2022	7/5/2021
tblConstructionPhase	PhaseEndDate	6/4/2021	5/10/2021
tblConstructionPhase	PhaseStartDate	5/31/2022	7/20/2021
tblConstructionPhase	PhaseStartDate	6/17/2021	7/6/2021
tblConstructionPhase	PhaseStartDate	6/5/2021	5/11/2021
tblConstructionPhase	PhaseStartDate	5/5/2022	6/22/2021
tblConstructionPhase	PhaseStartDate	5/29/2021	5/4/2021
tblFireplaces	NumberGas	4.50	0.00
tblFireplaces	NumberNoFireplace	1.44	18.00
tblFireplaces	NumberWood	7.74	0.00
tblGrading	AcresOfGrading	15.00	3.93
tblLandUse	LotAcreage	5.84	3.19
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	8.62	9.52

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0307	40.5389	22.0295	0.0415	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,022.5176	4,022.5176	1.1950	0.0000	4,049.1704
2022	3.8147	17.7648	18.8674	0.0334	0.2446	0.8934	1.1379	0.0659	0.8453	0.9113	0.0000	3,199.6389	3,199.6389	0.6436	0.0000	3,215.7296
<b>Maximum</b>	<b>4.0307</b>	<b>40.5389</b>	<b>22.0295</b>	<b>0.0415</b>	<b>18.2141</b>	<b>2.0454</b>	<b>20.2595</b>	<b>9.9699</b>	<b>1.8818</b>	<b>11.8517</b>	<b>0.0000</b>	<b>4,022.5176</b>	<b>4,022.5176</b>	<b>1.1950</b>	<b>0.0000</b>	<b>4,049.1704</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0307	40.5389	22.0295	0.0415	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,022.5176	4,022.5176	1.1950	0.0000	4,049.1704
2022	3.8147	17.7648	18.8674	0.0334	0.2446	0.8934	1.1379	0.0659	0.8453	0.9113	0.0000	3,199.6389	3,199.6389	0.6436	0.0000	3,215.7296
<b>Maximum</b>	<b>4.0307</b>	<b>40.5389</b>	<b>22.0295</b>	<b>0.0415</b>	<b>18.2141</b>	<b>2.0454</b>	<b>20.2595</b>	<b>9.9699</b>	<b>1.8818</b>	<b>11.8517</b>	<b>0.0000</b>	<b>4,022.5176</b>	<b>4,022.5176</b>	<b>1.1950</b>	<b>0.0000</b>	<b>4,049.1704</b>



Diablo Meadows Project - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3198	0.0825	5.4958	0.0132		0.6624	0.6624		0.6624	0.6624	96.5632	2.6741	99.2373	0.4540	0.0000	110.5869
Energy	0.0155	0.1321	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.6291	168.6291	3.2300e-003	3.0900e-003	169.6311
Mobile	0.2120	0.9666	2.5450	8.9600e-003	0.8408	7.4400e-003	0.8482	0.2249	6.9500e-003	0.2319		907.6690	907.6690	0.0326		908.4842
<b>Total</b>	<b>1.5473</b>	<b>1.1812</b>	<b>8.0970</b>	<b>0.0230</b>	<b>0.8408</b>	<b>0.6806</b>	<b>1.5213</b>	<b>0.2249</b>	<b>0.6801</b>	<b>0.9050</b>	<b>96.5632</b>	<b>1,078.9722</b>	<b>1,175.5354</b>	<b>0.4898</b>	<b>3.0900e-003</b>	<b>1,188.7023</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8264	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003	0.0000	2.6741	2.6741	2.5700e-003	0.0000	2.7384
Energy	0.0145	0.1239	0.0527	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1063	158.1063	3.0300e-003	2.9000e-003	159.0459
Mobile	0.2075	0.9379	2.4386	8.4700e-003	0.7907	7.0500e-003	0.7978	0.2115	6.5900e-003	0.2181		857.5505	857.5505	0.0312		858.3313
<b>Total</b>	<b>1.0483</b>	<b>1.0789</b>	<b>3.9767</b>	<b>9.3400e-003</b>	<b>0.7907</b>	<b>0.0253</b>	<b>0.8160</b>	<b>0.2115</b>	<b>0.0248</b>	<b>0.2364</b>	<b>0.0000</b>	<b>1,018.3309</b>	<b>1,018.3309</b>	<b>0.0368</b>	<b>2.9000e-003</b>	<b>1,020.1156</b>

## Diablo Meadows Project - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	32.25	8.66	50.89	59.32	5.95	96.29	46.36	5.95	96.35	73.88	100.00	5.62	13.37	92.48	6.15	14.18

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2021	5/3/2021	5	1	
2	Site Preparation	Site Preparation	5/4/2021	5/10/2021	5	5	
3	Grading	Grading	5/11/2021	6/21/2021	5	30	
4	Building Construction	Building Construction	7/6/2021	7/4/2022	5	260	
5	Paving	Paving	6/22/2021	7/5/2021	5	10	
6	Architectural Coating	Architectural Coating	7/20/2021	7/18/2022	5	260	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 3.93**

**Acres of Paving: 0.74**

**Residential Indoor: 65,610; Residential Outdoor: 21,870; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,934 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Diablo Meadows Project - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Diablo Meadows Project - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3445	0.0000	0.3445	0.0522	0.0000	0.0522			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>0.3445</b>	<b>1.5513</b>	<b>1.8959</b>	<b>0.0522</b>	<b>1.4411</b>	<b>1.4933</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>



Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0160	0.5416	0.1198	1.5400e-003	0.0349	1.6900e-003	0.0366	9.5800e-003	1.6200e-003	0.0112		165.1421	165.1421	8.7400e-003		165.3606
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0348	0.3447	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.4305	109.4305	2.4800e-003		109.4924
<b>Total</b>	<b>0.0671</b>	<b>0.5764</b>	<b>0.4645</b>	<b>2.6400e-003</b>	<b>0.1582</b>	<b>2.4700e-003</b>	<b>0.1606</b>	<b>0.0423</b>	<b>2.3300e-003</b>	<b>0.0446</b>		<b>274.5726</b>	<b>274.5726</b>	<b>0.0112</b>		<b>274.8530</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3445	0.0000	0.3445	0.0522	0.0000	0.0522			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>0.3445</b>	<b>1.5513</b>	<b>1.8959</b>	<b>0.0522</b>	<b>1.4411</b>	<b>1.4933</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0160	0.5416	0.1198	1.5400e-003	0.0349	1.6900e-003	0.0366	9.5800e-003	1.6200e-003	0.0112		165.1421	165.1421	8.7400e-003		165.3606
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0348	0.3447	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.4305	109.4305	2.4800e-003		109.4924
<b>Total</b>	<b>0.0671</b>	<b>0.5764</b>	<b>0.4645</b>	<b>2.6400e-003</b>	<b>0.1582</b>	<b>2.4700e-003</b>	<b>0.1606</b>	<b>0.0423</b>	<b>2.3300e-003</b>	<b>0.0446</b>		<b>274.5726</b>	<b>274.5726</b>	<b>0.0112</b>		<b>274.8530</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0418	0.4137	1.3200e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		131.3166	131.3166	2.9700e-003		131.3909
<b>Total</b>	<b>0.0613</b>	<b>0.0418</b>	<b>0.4137</b>	<b>1.3200e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>131.3166</b>	<b>131.3166</b>	<b>2.9700e-003</b>		<b>131.3909</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0418	0.4137	1.3200e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		131.3166	131.3166	2.9700e-003		131.3909
<b>Total</b>	<b>0.0613</b>	<b>0.0418</b>	<b>0.4137</b>	<b>1.3200e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>131.3166</b>	<b>131.3166</b>	<b>2.9700e-003</b>		<b>131.3909</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1610	0.0000	6.1610	3.3252	0.0000	3.3252			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.1610</b>	<b>1.1599</b>	<b>7.3209</b>	<b>3.3252</b>	<b>1.0671</b>	<b>4.3924</b>		<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895.1495</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0348	0.3447	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.4305	109.4305	2.4800e-003		109.4924
<b>Total</b>	<b>0.0511</b>	<b>0.0348</b>	<b>0.3447</b>	<b>1.1000e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>109.4305</b>	<b>109.4305</b>	<b>2.4800e-003</b>		<b>109.4924</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1610	0.0000	6.1610	3.3252	0.0000	3.3252			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.1610</b>	<b>1.1599</b>	<b>7.3209</b>	<b>3.3252</b>	<b>1.0671</b>	<b>4.3924</b>	<b>0.0000</b>	<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895,1495</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0348	0.3447	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.4305	109.4305	2.4800e-003		109.4924
<b>Total</b>	<b>0.0511</b>	<b>0.0348</b>	<b>0.3447</b>	<b>1.1000e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>109.4305</b>	<b>109.4305</b>	<b>2.4800e-003</b>		<b>109.4924</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0230	0.7296	0.1961	1.8600e-003	0.0474	1.6200e-003	0.0490	0.0136	1.5500e-003	0.0152		197.1390	197.1390	0.0103		197.3958
Worker	0.0681	0.0464	0.4596	1.4600e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		145.9073	145.9073	3.3000e-003		145.9899
<b>Total</b>	<b>0.0911</b>	<b>0.7760</b>	<b>0.6557</b>	<b>3.3200e-003</b>	<b>0.2117</b>	<b>2.6500e-003</b>	<b>0.2143</b>	<b>0.0572</b>	<b>2.5000e-003</b>	<b>0.0597</b>		<b>343.0463</b>	<b>343.0463</b>	<b>0.0136</b>		<b>343.3856</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0230	0.7296	0.1961	1.8600e-003	0.0474	1.6200e-003	0.0490	0.0136	1.5500e-003	0.0152		197.1390	197.1390	0.0103		197.3958
Worker	0.0681	0.0464	0.4596	1.4600e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		145.9073	145.9073	3.3000e-003		145.9899
<b>Total</b>	<b>0.0911</b>	<b>0.7760</b>	<b>0.6557</b>	<b>3.3200e-003</b>	<b>0.2117</b>	<b>2.6500e-003</b>	<b>0.2143</b>	<b>0.0572</b>	<b>2.5000e-003</b>	<b>0.0597</b>		<b>343.0463</b>	<b>343.0463</b>	<b>0.0136</b>		<b>343.3856</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>



Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0214	0.6908	0.1843	1.8400e-003	0.0474	1.4100e-003	0.0488	0.0136	1.3500e-003	0.0150		195.1872	195.1872	9.8100e-003		195.4325
Worker	0.0636	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323
<b>Total</b>	<b>0.0850</b>	<b>0.7324</b>	<b>0.6061</b>	<b>3.2500e-003</b>	<b>0.2117</b>	<b>2.4200e-003</b>	<b>0.2141</b>	<b>0.0572</b>	<b>2.2800e-003</b>	<b>0.0595</b>		<b>335.7456</b>	<b>335.7456</b>	<b>0.0128</b>		<b>336.0648</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

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**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0214	0.6908	0.1843	1.8400e-003	0.0474	1.4100e-003	0.0488	0.0136	1.3500e-003	0.0150		195.1872	195.1872	9.8100e-003		195.4325
Worker	0.0636	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323
<b>Total</b>	<b>0.0850</b>	<b>0.7324</b>	<b>0.6061</b>	<b>3.2500e-003</b>	<b>0.2117</b>	<b>2.4200e-003</b>	<b>0.2141</b>	<b>0.0572</b>	<b>2.2800e-003</b>	<b>0.0595</b>		<b>335.7456</b>	<b>335.7456</b>	<b>0.0128</b>		<b>336.0648</b>

**3.6 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342		1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2878</b>	<b>10.8399</b>	<b>12.2603</b>	<b>0.0189</b>		<b>0.5788</b>	<b>0.5788</b>		<b>0.5342</b>	<b>0.5342</b>		<b>1,804.5523</b>	<b>1,804.5523</b>	<b>0.5670</b>		<b>1,818.7270</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.6 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0464	0.4596	1.4600e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		145.9073	145.9073	3.3000e-003		145.9899
<b>Total</b>	<b>0.0681</b>	<b>0.0464</b>	<b>0.4596</b>	<b>1.4600e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>145.9073</b>	<b>145.9073</b>	<b>3.3000e-003</b>		<b>145.9899</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342	0.0000	1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2878</b>	<b>10.8399</b>	<b>12.2603</b>	<b>0.0189</b>		<b>0.5788</b>	<b>0.5788</b>		<b>0.5342</b>	<b>0.5342</b>	<b>0.0000</b>	<b>1,804.5523</b>	<b>1,804.5523</b>	<b>0.5670</b>		<b>1,818.7270</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.6 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0464	0.4596	1.4600e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		145.9073	145.9073	3.3000e-003		145.9899
<b>Total</b>	<b>0.0681</b>	<b>0.0464</b>	<b>0.4596</b>	<b>1.4600e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>145.9073</b>	<b>145.9073</b>	<b>3.3000e-003</b>		<b>145.9899</b>

**3.7 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>2.0251</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0136	9.2800e-003	0.0919	2.9000e-004	0.0329	2.1000e-004	0.0331	8.7200e-003	1.9000e-004	8.9100e-003		29.1815	29.1815	6.6000e-004		29.1980
<b>Total</b>	<b>0.0136</b>	<b>9.2800e-003</b>	<b>0.0919</b>	<b>2.9000e-004</b>	<b>0.0329</b>	<b>2.1000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9100e-003</b>		<b>29.1815</b>	<b>29.1815</b>	<b>6.6000e-004</b>		<b>29.1980</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>2.0251</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0136	9.2800e-003	0.0919	2.9000e-004	0.0329	2.1000e-004	0.0331	8.7200e-003	1.9000e-004	8.9100e-003		29.1815	29.1815	6.6000e-004		29.1980
<b>Total</b>	<b>0.0136</b>	<b>9.2800e-003</b>	<b>0.0919</b>	<b>2.9000e-004</b>	<b>0.0329</b>	<b>2.1000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9100e-003</b>		<b>29.1815</b>	<b>29.1815</b>	<b>6.6000e-004</b>		<b>29.1980</b>

**3.7 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>2.0107</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0127	8.3200e-003	0.0844	2.8000e-004	0.0329	2.0000e-004	0.0331	8.7200e-003	1.9000e-004	8.9000e-003		28.1117	28.1117	5.9000e-004		28.1265
<b>Total</b>	<b>0.0127</b>	<b>8.3200e-003</b>	<b>0.0844</b>	<b>2.8000e-004</b>	<b>0.0329</b>	<b>2.0000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9000e-003</b>		<b>28.1117</b>	<b>28.1117</b>	<b>5.9000e-004</b>		<b>28.1265</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8062					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>2.0107</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0127	8.3200e-003	0.0844	2.8000e-004	0.0329	2.0000e-004	0.0331	8.7200e-003	1.9000e-004	8.9000e-003		28.1117	28.1117	5.9000e-004		28.1265
<b>Total</b>	<b>0.0127</b>	<b>8.3200e-003</b>	<b>0.0844</b>	<b>2.8000e-004</b>	<b>0.0329</b>	<b>2.0000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9000e-003</b>		<b>28.1117</b>	<b>28.1117</b>	<b>5.9000e-004</b>		<b>28.1265</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network



Diablo Meadows Project - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2075	0.9379	2.4386	8.4700e-003	0.7907	7.0500e-003	0.7978	0.2115	6.5900e-003	0.2181		857.5505	857.5505	0.0312		858.3313
Unmitigated	0.2120	0.9666	2.5450	8.9600e-003	0.8408	7.4400e-003	0.8482	0.2249	6.9500e-003	0.2319		907.6690	907.6690	0.0326		908.4842

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	171.36	171.36	171.36	395,774	372,226
Total	171.36	171.36	171.36	395,774	372,226

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Single Family Housing	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0145	0.1239	0.0527	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1063	158.1063	3.0300e-003	2.9000e-003	159.0459
NaturalGas Unmitigated	0.0155	0.1321	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.6291	168.6291	3.2300e-003	3.0900e-003	169.6311

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1433.35	0.0155	0.1321	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.6291	168.6291	3.2300e-003	3.0900e-003	169.6311
<b>Total</b>		<b>0.0155</b>	<b>0.1321</b>	<b>0.0562</b>	<b>8.4000e-004</b>		<b>0.0107</b>	<b>0.0107</b>		<b>0.0107</b>	<b>0.0107</b>		<b>168.6291</b>	<b>168.6291</b>	<b>3.2300e-003</b>	<b>3.0900e-003</b>	<b>169.6311</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.3439	0.0145	0.1239	0.0527	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1063	158.1063	3.0300e-003	2.9000e-003	159.0459
<b>Total</b>		<b>0.0145</b>	<b>0.1239</b>	<b>0.0527</b>	<b>7.9000e-004</b>		<b>0.0100</b>	<b>0.0100</b>		<b>0.0100</b>	<b>0.0100</b>		<b>158.1063</b>	<b>158.1063</b>	<b>3.0300e-003</b>	<b>2.9000e-003</b>	<b>159.0459</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Diablo Meadows Project - Bay Area AQMD Air District, Winter

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8264	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003	0.0000	2.6741	2.6741	2.5700e-003	0.0000	2.7384
Unmitigated	1.3198	0.0825	5.4958	0.0132		0.6624	0.6624		0.6624	0.6624	96.5632	2.6741	99.2373	0.4540	0.0000	110.5869

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7048					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4416	0.0654	4.0104	0.0131		0.6542	0.6542		0.6542	0.6542	96.5632	0.0000	96.5632	0.4514	0.0000	107.8485
Landscaping	0.0448	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003		2.6741	2.6741	2.5700e-003		2.7384
<b>Total</b>	<b>1.3198</b>	<b>0.0825</b>	<b>5.4958</b>	<b>0.0132</b>		<b>0.6624</b>	<b>0.6624</b>		<b>0.6624</b>	<b>0.6624</b>	<b>96.5632</b>	<b>2.6741</b>	<b>99.2373</b>	<b>0.4540</b>	<b>0.0000</b>	<b>110.5869</b>

Diablo Meadows Project - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6529					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0448	0.0171	1.4854	8.0000e-005		8.2200e-003	8.2200e-003		8.2200e-003	8.2200e-003		2.6741	2.6741	2.5700e-003		2.7384
<b>Total</b>	<b>0.8264</b>	<b>0.0171</b>	<b>1.4854</b>	<b>8.0000e-005</b>		<b>8.2200e-003</b>	<b>8.2200e-003</b>		<b>8.2200e-003</b>	<b>8.2200e-003</b>	<b>0.0000</b>	<b>2.6741</b>	<b>2.6741</b>	<b>2.5700e-003</b>	<b>0.0000</b>	<b>2.7384</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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## Diablo Meadows Project - Bay Area AQMD Air District, Winter

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Diablo Meadows Project

### Bay Area AQMD Air District, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation



Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	2	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	11	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	2.74400E-002	1.90150E-001	2.36000E-001	3.90000E-004	1.13600E-002	1.13600E-002	0.00000E+000	3.31923E+001	3.31923E+001	2.21000E-003	0.00000E+000	3.32477E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	1.90000E-004	1.52000E-003	1.84000E-003	0.00000E+000	9.00000E-005	9.00000E-005	0.00000E+000	2.68830E-001	2.68830E-001	2.00000E-005	0.00000E+000	2.69220E-001
Cranes	4.46800E-002	5.13500E-001	2.20360E-001	6.60000E-004	2.10700E-002	1.93800E-002	0.00000E+000	5.76623E+001	5.76623E+001	1.86500E-002	0.00000E+000	5.81285E+001
Excavators	3.78000E-003	3.55300E-002	5.39800E-002	9.00000E-005	1.72000E-003	1.59000E-003	0.00000E+000	7.48715E+000	7.48715E+000	2.42000E-003	0.00000E+000	7.54769E+000
Forklifts	4.73500E-002	4.35450E-001	4.52690E-001	6.00000E-004	2.99300E-002	2.75300E-002	0.00000E+000	5.23736E+001	5.23736E+001	1.69400E-002	0.00000E+000	5.27971E+001
Generator Sets	4.46700E-002	3.96020E-001	4.78440E-001	8.60000E-004	2.04400E-002	2.04400E-002	0.00000E+000	7.34770E+001	7.34770E+001	3.62000E-003	0.00000E+000	7.35675E+001
Graders	6.79000E-003	8.88700E-002	2.65100E-002	1.00000E-004	2.82000E-003	2.59000E-003	0.00000E+000	8.73189E+000	8.73189E+000	2.82000E-003	0.00000E+000	8.80249E+000
Pavers	1.23000E-003	1.29800E-002	1.45200E-002	2.00000E-005	6.30000E-004	5.80000E-004	0.00000E+000	2.06412E+000	2.06412E+000	6.70000E-004	0.00000E+000	2.08081E+000
Paving Equipment	1.44000E-003	1.45500E-002	1.90600E-002	3.00000E-005	7.20000E-004	6.60000E-004	0.00000E+000	2.68383E+000	2.68383E+000	8.70000E-004	0.00000E+000	2.70553E+000
Rollers	1.42000E-003	1.44300E-002	1.41000E-002	2.00000E-005	8.80000E-004	8.10000E-004	0.00000E+000	1.72879E+000	1.72879E+000	5.60000E-004	0.00000E+000	1.74277E+000
Rubber Tired Dozers	2.45900E-002	2.57830E-001	9.48900E-002	2.00000E-004	1.25100E-002	1.15100E-002	0.00000E+000	1.76382E+001	1.76382E+001	5.70000E-003	0.00000E+000	1.77808E+001
Tractors/Loaders/Backhoes	7.12600E-002	7.22840E-001	9.03090E-001	1.25000E-003	4.11300E-002	3.78400E-002	0.00000E+000	1.09583E+002	1.09583E+002	3.54400E-002	0.00000E+000	1.10469E+002
Welders	3.76500E-002	1.93140E-001	2.21940E-001	3.30000E-004	8.97000E-003	8.97000E-003	0.00000E+000	2.44687E+001	2.44687E+001	3.06000E-003	0.00000E+000	2.45451E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	2.74400E-002	1.90140E-001	2.36000E-001	3.90000E-004	1.13600E-002	1.13600E-002	0.00000E+000	3.31923E+001	3.31923E+001	2.21000E-003	0.00000E+000	3.32476E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	1.90000E-004	1.52000E-003	1.84000E-003	0.00000E+000	9.00000E-005	9.00000E-005	0.00000E+000	2.68830E-001	2.68830E-001	2.00000E-005	0.00000E+000	2.69220E-001
Cranes	4.46800E-002	5.13500E-001	2.20360E-001	6.60000E-004	2.10700E-002	1.93800E-002	0.00000E+000	5.76622E+001	5.76622E+001	1.86500E-002	0.00000E+000	5.81284E+001
Excavators	3.78000E-003	3.55300E-002	5.39800E-002	9.00000E-005	1.72000E-003	1.59000E-003	0.00000E+000	7.48714E+000	7.48714E+000	2.42000E-003	0.00000E+000	7.54768E+000
Forklifts	4.73500E-002	4.35450E-001	4.52690E-001	6.00000E-004	2.99300E-002	2.75300E-002	0.00000E+000	5.23736E+001	5.23736E+001	1.69400E-002	0.00000E+000	5.27970E+001
Generator Sets	4.46700E-002	3.96020E-001	4.78440E-001	8.60000E-004	2.04400E-002	2.04400E-002	0.00000E+000	7.34769E+001	7.34769E+001	3.62000E-003	0.00000E+000	7.35674E+001
Graders	6.79000E-003	8.88700E-002	2.65100E-002	1.00000E-004	2.82000E-003	2.59000E-003	0.00000E+000	8.73188E+000	8.73188E+000	2.82000E-003	0.00000E+000	8.80248E+000
Pavers	1.23000E-003	1.29800E-002	1.45200E-002	2.00000E-005	6.30000E-004	5.80000E-004	0.00000E+000	2.06412E+000	2.06412E+000	6.70000E-004	0.00000E+000	2.08081E+000
Paving Equipment	1.44000E-003	1.45500E-002	1.90600E-002	3.00000E-005	7.20000E-004	6.60000E-004	0.00000E+000	2.68383E+000	2.68383E+000	8.70000E-004	0.00000E+000	2.70553E+000
Rollers	1.42000E-003	1.44300E-002	1.41000E-002	2.00000E-005	8.80000E-004	8.10000E-004	0.00000E+000	1.72879E+000	1.72879E+000	5.60000E-004	0.00000E+000	1.74277E+000
Rubber Tired Dozers	2.45900E-002	2.57820E-001	9.48900E-002	2.00000E-004	1.25100E-002	1.15100E-002	0.00000E+000	1.76382E+001	1.76382E+001	5.70000E-003	0.00000E+000	1.77808E+001
Tractors/Loaders/Backhoes	7.12600E-002	7.22840E-001	9.03090E-001	1.25000E-003	4.11300E-002	3.78400E-002	0.00000E+000	1.09583E+002	1.09583E+002	3.54400E-002	0.00000E+000	1.10469E+002
Welders	3.76500E-002	1.93140E-001	2.21940E-001	3.30000E-004	8.97000E-003	8.97000E-003	0.00000E+000	2.44687E+001	2.44687E+001	3.06000E-003	0.00000E+000	2.45451E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	5.25901E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20510E-006	1.20510E-006	0.00000E+000	0.00000E+000	1.20309E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21397E-006	1.21397E-006	0.00000E+000	0.00000E+000	1.20423E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33562E-006	1.33562E-006	0.00000E+000	0.00000E+000	1.32491E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14562E-006	1.14562E-006	0.00000E+000	0.00000E+000	1.13643E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22487E-006	1.22487E-006	0.00000E+000	0.00000E+000	1.22337E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14523E-006	1.14523E-006	0.00000E+000	0.00000E+000	1.13604E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	3.87852E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13390E-006	1.13390E-006	0.00000E+000	0.00000E+000	1.12481E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18632E-006	1.18632E-006	0.00000E+000	0.00000E+000	1.17680E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22606E-006	1.22606E-006	0.00000E+000	0.00000E+000	1.22224E-006

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.03	0.01	0.03	0.01	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.09	0.05	0.09	0.05	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.05	0.02	0.05	0.02	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	7.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.00	100.00	100.00	0.00	100.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.13	2.90	4.36	5.45	5.19	5.56	0.00	5.50	5.50	4.19	0.00	5.50
Natural Gas	6.38	6.26	6.24	6.67	6.15	6.15	0.00	6.24	6.24	7.41	5.88	6.24
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	14.21	15.73	19.98	20.43	17.70
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.10	0.32		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.08	0.50		
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.05			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	1.00	Project Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.01			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.06			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	3.00			
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00			2.00
No	Commute	Provide Ride Sharing Program	5.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.06		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	7.00	
No	Install High Efficiency Lighting		
Yes	On-site Renewable		100.00



Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**Appendix B**  
**Planning Survey Report**

# Application Form and Planning Survey Report

## To Comply With and Receive Permit Coverage Under The East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan

Please complete this application to apply for take authorization under the state and federal East Contra Costa County HCP/NCCP incidental take permits. The East Contra Costa County Habitat Conservancy ("Conservancy") or local jurisdiction (City of Brentwood, City of Clayton, City of Oakley, City of Pittsburg, and Contra Costa County) may request more information in order to deem the application complete.

### I. PROJECT OVERVIEW

PROJECT INFORMATION	
<b>PROJECT NAME:</b> Diablo Meadows	
<b>PROJECT TYPE:</b> <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Transportation <input type="checkbox"/> Utility <input type="checkbox"/> Other	
<b>PROJECT DESCRIPTION (BRIEF):</b> 18 unit residential subdivision on 8.66+/- acres. A detailed project description is included in Attachment A.	
<b>PROJECT ADDRESS/LOCATION:</b> West side of Mitchell Canyon Road and east of the south end of Lewis Way in Clayton, Contra Costa County, California.	
<b>PARCEL/PROJECT SIZE (ACRES):</b> 8.66+/- acres	
<b>PROJECT APN(S):</b> 121-090-016-1 and 121-090-011-2	
<b>APPLICATION SUBMITTAL DATE:</b> JULY 2020	<b>FINAL PSR DATE:</b> (City/County/Conservancy use)
<b>LEAD PLANNER:</b> Matthew Feske and/or Milan Sikela	
<b>JURISDICTION:</b> <input type="checkbox"/> City of Brentwood <input checked="" type="checkbox"/> City of Clayton <input type="checkbox"/> City of Oakley <input type="checkbox"/> City of Pittsburg <input type="checkbox"/> Contra Costa County <input type="checkbox"/> Participating Special Entity*	
<small>*Participating Special Entities are organizations not subject to the authority of a local jurisdiction. Such organizations may include school districts, irrigation districts, transportation agencies, local park districts, geological hazard abatement districts, or other utilities or special districts that own land or provide public services.</small>	
<b>DEVELOPMENT FEE ZONE:</b> <input type="checkbox"/> Zone I <input checked="" type="checkbox"/> Zone II <input type="checkbox"/> Zone III <input type="checkbox"/> Zone IV	
<small>See figure 9-1 of the HCP/NCCP at <a href="http://www.cocohcp.org">www.cocohcp.org</a> for a generalized development fee zone map. Detailed development fee zone maps by jurisdiction are available from the jurisdiction.</small>	

PROJECT APPLICANT INFORMATION	
<b>APPLICANT'S NAME:</b> DeNova Homes, Inc.	
<b>AUTHORIZED AGENT'S NAME AND TITLE:</b> Kerri Watt, Director of Entitlements	
<b>PHONE NO.:</b> (925) 605-9304	<b>APPLICANT'S E-MAIL:</b> kwatt@denovahomes.com
<b>MAILING ADDRESS:</b> 1500 Willow Pass Court, Concord, CA 94520	

BIOLOGIST INFORMATION <sup>1</sup>	
<b>BIOLOGICAL/ENVIRONMENTAL FIRM:</b> Moore Biological Consultants	
<b>CONTACT NAME AND TITLE:</b> Diane S. Moore, M.S.	
<b>PHONE NO.:</b> (209) 745-1159	<b>CONTACT'S E-MAIL:</b> moorebio@softcom.net
<b>MAILING ADDRESS:</b> Moore Biological Consultants, 10330 Twin Cities Rd., Ste. 30, Galt, CA	

<sup>1</sup> A USFWS/CDFW-approved biologist (project-specific) is required to conduct the surveys. Please submit biologist(s) approval request to the Conservancy.

## II. PROJECT DETAILS

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Please complete and/or provide the following attachments:

### 1) Project Description

Attach as **Attachment A: Project Description**. Provide a detailed written description that concisely and completely describes the project and location. Include the following information:

- All activities proposed for the site or project, including roads utilized, construction staging areas, and the installation of underground facilities, to ensure the entire project is covered by the HCP/NCCP permit
- Proposed construction dates, including details on construction phases, if applicable
- Reference a City/County application number for the project, if applicable
- General Best Management Practices, if applicable
- If the project will have temporary impacts, please provide a restoration plan describing how the site will be restored to pre-project conditions, including revegetation seed mixes or plantings and timing

### 2) Project Vicinity Map

Provide a project vicinity map. Attach as **Figure 1 in Attachment B: Figures**.

### 3) Project Site Plans

Provide any project site plans for the project. Attach as **Figure 2 in Attachment B: Figures**.

### 4) CEQA Document

Indicate the status of CEQA documents prepared for the project. Provide additional comments below table if necessary.

Type of Document	Status	Date Completed
<input checked="" type="checkbox"/> Initial Study	In preparation	
<input type="checkbox"/> Notice of Preparation		
<input type="checkbox"/> Draft EIR		
<input type="checkbox"/> Final EIR		
<input type="checkbox"/> Notice of Categorical Exemption		
<input type="checkbox"/> Notice of Statutory Exemption		
<input type="checkbox"/> Other (describe)		

The upcoming CEQA review is expected to occur during Summer 2020. This draft PSR has been prepared in support of the project application, providing technical biological information to assist in preparation of the Initial Study/Mitigated Negative Declaration.

## III. EXISTING CONDITIONS AND IMPACTS

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Please complete and/or provide the following attachments:

### 1) Field-Verified Land Cover Map<sup>2</sup>

Attach a field-verified land cover map in **Attachment B: Figures** and label as **Figure 3**. The map should contain all land cover types present on-site overlaid on aerial/satellite imagery. Map colors for the land cover types should conform to the HCP/NCCP (see *Figure 3-3: Landcover in the Inventory Area* for land cover type legend).

### 2) Photographs of the Project Site

Attach representative photos of the project site in **Attachment B: Figures** and label as **Figure 4**. Please provide captions for each photo.

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<sup>2</sup> For PSEs and city or county public works projects, please also identify permanent and temporary impact areas by overlaying crosshatching (permanent impacts) and hatching (temporary impacts) on the land cover map.

### 3) Land Cover Types and Impacts and Supplemental Tables

- For all terrestrial land cover types please provide calculations to the nearest **hundredth of an acre (0.01)**. For aquatic land cover types please provide calculations to the nearest **thousandth of an acre (0.001)**.
- Permanent Impacts** are broadly defined in the ECCC HCP/NCCP to include all areas removed from an undeveloped or habitat-providing state and includes land in the same parcel or project that is not developed, graded, physically altered, or directly affected in any way but is isolated from natural areas by the covered activity. Unless such undeveloped land is dedicated to the Preserve System or is a deed-restricted creek setback, the development mitigation fee will apply (if proposed, would require Conservancy approval).
- Temporary Impacts** are broadly defined in the ECCC HCP/NCCP as any impact on vegetation or habitat that does not result in permanent habitat removal (i.e. vegetation can eventually recover).
- If **wetland (riparian woodland/scrub, wetland, or aquatic)** land cover types are present on the parcel but will not be impacted please discuss in the following section 4) Jurisdictional Wetlands and Waters. Wetland impact fees will only be charged if wetland features are impacted. However, development fees will apply to the entire parcel.
- Stream** land cover type is considered a linear feature where impacts are calculated based on length impacted. The acreage within a stream, below Top of Bank (TOB), must be assigned to the adjacent land cover type(s). Insert area of impact to stream below TOB in parentheses after the Land Cover acreage number (e.g., Riparian Woodland/Scrub: 10 (0.036) – where 10 is the total impacted acreage including 0.036 acre, which is the acreage within stream TOB). Complete following supplemental **Stream Feature Detail** table to provide information for linear feet.
- Total Impacts** acreage should be the total parcel acreage (development project) or project footprint acreage (rural infrastructure or utility project).

*Proposed for HCP/NCCP Dedication  
on the Parcel  
(Requires Conservancy Approval)*

**Table 1: Land Cover Types and Impacts**

Land Cover Type	Permanent Impacts	Temporary Impacts	Stream Setback	Preserve System Dedication
<i>Grassland</i>				
Annual Grassland	8.07 acres			
Alkali Grassland				
Ruderal				
<i>Shrubland</i>				
Chaparral and Scrub				
<i>Woodland</i>				
Oak Savannah				
Oak Woodland				
<i>Riparian</i>				
Riparian Woodland/Scrub				
<i>Wetland</i>				
Permanent Wetland				
Seasonal Wetland	0.19 acres (will be avoided)			
Alkali Wetland				
<i>Aquatic</i>				
Aquatic (Reservoir/Open Water)				
Slough/Channel				
Pond				
Stream (in linear feet)	0.02 acres (345 lineal feet – will be avoided)	-	-	-
<i>Irrigated Agriculture</i>				
Pasture				
Cropland				
Orchard				
Vineyard				
<i>Other</i>				
Nonnative woodland				
Wind turbines				
<i>Developed (not counted toward Fees)</i>				
Urban	0.38			
Aqueduct				
Turf				
Landfill				
<b>TOTAL IMPACTS</b>	<b>8.66</b>			

**Identify any uncommon vegetation and uncommon landscape features<sup>3</sup>:**

**Supplemental to Table 1: Uncommon Vegetation and Landscape Features**

	Permanent Impacts	Temporary Impacts
<i>Uncommon Grassland Alliances</i>		
Purple Needlegrass Grassland		
Blue Wildrye Grassland		
Creeping Ryegrass Grassland		
Wildflower Fields		
Squirreltail Grassland		
One-sided Bluegrass Grassland		
Serpentine Bunchgrass Grassland		
Saltgrass Grassland		
Alkali Sacaton Bunchgrass Grassland		
<input type="checkbox"/> Other		
<i>Uncommon Landscape Features</i>		
Rock Outcrops		
Caves		
Springs and seeps		
Scalds		
Sand Deposits		
<input type="checkbox"/> Mines <sup>4</sup>		
<input type="checkbox"/> Buildings (bat roosts) <sup>3</sup>		
<input checked="" type="checkbox"/> Potential nest sites (trees or cliffs) <sup>3</sup>	103 trees (most will be retained)	

There are a total of 103 trees within the project site. Several of these trees are too small to support nesting raptors, but other songbirds may use smaller trees in the site for nesting.

**Please provide details of impacts to stream features:**

**Stream Name:** None

**Watershed:** Mt. Diablo Creek

**Supplemental to Table 1: Stream Feature Detail<sup>5</sup>**

Stream Width	Stream Type <sup>6</sup>	Permanent Impacts (linear feet) <sup>7</sup>	Temporary Impacts (linear feet) <sup>7</sup>
<input checked="" type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3rd or higher order <input checked="" type="checkbox"/> Ephemeral, 1st or 2nd order	0	0
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3rd or higher order <input type="checkbox"/> Ephemeral, 1st or 2nd order		
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3rd or higher order <input type="checkbox"/> Ephemeral, 1st or 2nd order		

<sup>3</sup> These acreages are for Conservancy tracking purposes. Impacts to these uncommon vegetation and landscape features should be accounted for within the land cover types in Table 1 (e.g., x acres of purple needlegrass in this supplemental table should be accounted for within annual grassland in Table 1).

<sup>4</sup> Insert amount/number, not acreage. Provide additional information on these features in Attachment A: Project Description.

<sup>5</sup> Use more than 1 row as necessary to describe impacts to streams on site.

<sup>6</sup> See glossary (Appendix A) for definition of stream type and order.

<sup>7</sup> Stream length is measured along stream centerline, based on length of impact to any part of the stream channel, TOB to TOB.

#### 4) Summary of Land Cover Types

Please provide a written summary of descriptions for land cover types found on site including characteristic vegetation.

**Annual Grassland:** The west part of the site consists of rolling hill vegetated with annual grassland vegetation (Figures 3 and 4a-4c). The east “panhandle” of the site near Mitchell Canyon Road is a flat terrace vegetated with annual grassland vegetation, although this area is much more disturbed by periodic mowing and/or disking presumably for fire suppression and weed abatement. Dominant species in the annual grasslands in the west part of the site include oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), California poppy (*Eschscholzia californica*), common bedstraw (*Galium aparine*), cut leaved geranium (*Geranium dissectum*) and (*Vicia americana*). Dominant species in the more disturbed grassland areas include oats, ripgut brome, black mustard (*Brassica nigra*), yellow star-thistle (*Centaurea solstitialis*), radish (*Raphanus sativa*), rose clover (*Trifolium hirtum*), and filaree (*Erodium* spp.).

**Seasonal Wetland:** There is marginal seasonal wetland feature in the west part of the site, located in a low valley at the base of two notable hillslopes (Figures 4d-4e and Wetland Delineation in Attachment E). Vegetation associated with this seasonal wetland includes perennial ryegrass (*Lolium perenne*), creeping wild rye (*Leymus triticoides*), curly dock (*Rumex crispus*), a few other marginal hydrophytes, and some upland species including black mustard and common bedstraw (*Galium aparine*).

**Stream:** There is a very weak ephemeral stream along the west edge of the site with a barely discernible Ordinary High Water Mark (OHWM) (Figure 4e and Wetland Delineation in Attachment E). The channel is approximately 1 to 2 feet wide with no adjacent wetlands. The south end of the seasonal wetland abruptly transitions to a defined channel with notable bed and bank that is best described as an ephemeral stream (See Wetland Delineation in Attachment E). The channel is approximately 3 feet wide with no adjacent wetlands.

**Urban/Developed:** There is an area in the northwest part of the site (Figure 3) that is depicted on the ECCC HCP/NCCP Map of Fee Zones and Land Cover Types as urbanized and previously developed. An historical aerial photograph from 1939 shows almost the entire site as an orchard; a home site was likely present in a gap in the orchard in the area mapped as urbanized. While no evidence of structures remains, there is a notably straight row of walnuts in this area that was likely along an old fence line and a depression area in the nearby seasonal wetland that appears to be the remnants of a small constructed stock pond.

**Trees:** There are trees scattered throughout the project site, including remnant orchard trees and stumps. Valley oak (*Quercus lobata*) is the most dominant tree species, intermixed with lesser numbers of black walnut (*Juglans californica*), coast live oak (*Quercus agrifolia*), and coast redwood (*Sequoia sempervirens*). There are also a few relatively small ornamental species and fruit trees such as California pepper tree (*Schinus molle*), almond (*Prunus dulcis*), and olive (*Olea europaea*) in the site (Figure 5a). Several of the trees in the east part of the site are along the fence-lines bordering the site and adjacent parcels.

#### 5) Jurisdictional Wetlands and Waters

If wetlands and waters are present on the project site, project proponents must conduct a delineation of jurisdictional wetlands and waters. Jurisdictional wetlands and waters are defined on pages 1-18 and 1-19 of the ECCC HCP/NCCP as the following land cover types: permanent wetland, seasonal wetland, alkali wetland, aquatic, pond, slough/channel, and stream. It should be noted that these features differ for federal and state jurisdictions. If you have identified any of these land cover types in Table 1, complete the section below.

- a) Attach the wetland delineation report as **Attachment E: Wetland Delineation**. If a wetland delineation has not been completed, please explain below in section 4c.



**b) Please check the following permits the project may require. Please submit copies of these permits to the Conservancy prior to the start of construction:**

- CWA Section 404 Permit<sup>8</sup>
 CWA Section 401 Water Quality Certification  
 Waste Discharge Requirements
  Lake and Streambed Alteration Agreement

**c) Provide any additional information on impacts to jurisdictional wetland and waters below, including status of the permit(s):**

A wetland delineation of the site was conducted on April 3, 2020 and April 29, 2020. There is a total of 0.21 acres of potentially jurisdictional Waters of the U.S., including Wetlands in the project site. This total includes a 0.19+/- acre seasonal wetland and 0.020+/- acres of ephemeral streams, which are respectively labeled “SW-1”, and “ES-1” and “ES-2” on the Wetland Delineation Map (Attachment E).

The project has been designed to accomplish 100% avoidance of potentially jurisdictional Waters of the U.S. and wetlands. Further, the project provides minimum 25-foot setbacks between potentially jurisdictional features and the limits of grading (Figures 2c-2f).

**6) Species-Specific Planning Survey Requirements**

Based on the land cover types found on-site and identified in Table 1, check the applicable boxes in Table 2a.

**Table 2a. Species –Specific Planning Survey Requirements**

Land Cover Type in Project Area	Required Survey Species	Habitat Element in Project Area	Planning Survey Requirement <sup>9</sup>	Info in HCP
<input checked="" type="checkbox"/> Grasslands, oak savannah, agriculture, or ruderal	<input checked="" type="checkbox"/> San Joaquin kit fox	Assumed if within modeled range of species	If within modeled range of species, identify and map potential breeding or denning habitat within the project site and a 250-ft radius around the project footprint.	pp. 6-37 to 6-38
	<input checked="" type="checkbox"/> Western burrowing owl	Assumed	Identify and map potential breeding habitat within the project site and a 500-ft radius around the project footprint. Please note the HCP requires buffers for occupied burrows. Surveys may need to encompass an area larger than the project footprint.	pp. 6-39 to 6-41
<input type="checkbox"/> Aquatic (ponds, wetlands, streams, sloughs, channels, and marshes)	<input type="checkbox"/> Giant garter snake	Aquatic habitat accessible from the San Joaquin River	Identify and map potential habitat.	pp. 6-43 to 6-45
	<input type="checkbox"/> California tiger salamander	Ponds and wetlands Vernal pools Reservoirs Small lakes	Identify and map potential breeding habitat. Document habitat quality and features. Provide the Conservancy with photo-documentation and report.	pp. 6-45
	<input type="checkbox"/> California red-legged frog	Slow-moving streams, ponds and wetlands	Identify and map potential breeding habitat. Document habitat quality and features. Provide the Conservancy with photo-documentation and report.	p. 6-46
	<input type="checkbox"/> Covered shrimp	Seasonal wetlands Vernal pools Sandstone rock outcrops Sandstone depressions	Identify and map potential habitat. Please note the HCP requires a 50 foot non-disturbance buffer from seasonal wetlands that may be occupied by covered shrimp. Surveys may need to encompass an area larger than the project footprint.	pp. 6-46 to 6-48

<sup>8</sup> The USACE Sacramento District issued a Regional General Permit 1 (RGP) related to ECCC HCP/NCCP covered activities. The RGP is designed to streamline wetland permitting in the entire ECCC HCP/NCCP Plan Area by coordinating the avoidance, minimization, and mitigation measures in the Plan with the Corps’ wetland permitting requirement. Applicants seeking authorization under this RGP shall notify the Corps in accordance with RGP general condition number 18 (Notification).

<sup>9</sup> The planning survey requirements in this table are not comprehensive. Please refer to Chapter 6.4.3 in the ECCC HCP/NCCP for more detail.

<input checked="" type="checkbox"/> Any	<input type="checkbox"/> Townsend's big-eared bat	Rock formations with caves Mines Abandoned buildings outside urban area	Map and document potential breeding or roosting habitat.	pp. 6-36 to 6-37
	<input type="checkbox"/> Swainson's hawk	Potential nest sites within 1,000 feet of project	Inspect large trees for presence of nest sites. Document and map.	pp. 6-41 to 6-43
	<input checked="" type="checkbox"/> Golden Eagle	Potential nest sites with ½ mile of project	Inspect large trees for presence of nest sites. Document and map.	pp. 6-38 to 6-39

Surveys for all covered species must be conducted by a qualified biologist (USFWS/CDFW project-specific approved). Please submit biologist approval request to the East Contra Costa County Habitat Conservancy.  
Surveys for all covered species must be conducted according to the respective USFWS or CDFW survey protocols, as identified in Chapter 6.4.3 in the HCP/NCCP.

## 7) Planning Survey Species Habitat Maps

Provide Planning Survey Species Habitat Maps as required in Table 2a, attach as **Figure 5 in Attachment B: Figures**.

## 8) Results of Species Specific Surveys

Provide a written summary describing the results of the planning surveys. Please discuss the location, quantity, and quality of suitable habitat for specified covered wildlife species on the project site.

**General Setting:** The project site is in Clayton, in Contra Costa County, California (Figure 1). The site is in Section 14 within Township 1 North, Range 1 West of the USGS Clayton topographic quadrangle (Figure 2). The site slopes generally down toward the northwest and there is a notable valley in the west-central part of the site (Figure 2b). Site elevations range from approximately 475 to 550 feet above mean sea level. Land uses in this portion of Contra Costa County are primarily residential and open space, mostly used for rangeland. Lands to the north and east of the site are primarily residential subdivisions. There are mines and open rangeland areas to the west and south of the site.

The site provides potentially suitable habitat for San Joaquin kit fox (*Vulpes macrotis mutica*), western burrowing owl (*Athene cunicularia*), and golden eagles (*Aquila chrysaetos*) (Table 1 and Figure 3). Each of these species is discussed below.

**San Joaquin Kit Fox:** The site consists of annual grassland and ruderal grassland (Figure 5a) that is just within the historical range of San Joaquin kit fox. California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) contains no occurrences of San Joaquin kit fox within 0.5 miles of the site (Figure 5b). The site is within the modeled range of the species and is identified as "Suitable Core Habitat" in Appendix D of the ECCCHCP/NCCP. Therefore, the on-site grasslands were inspected for burrows or dens with evidence of kit fox occupancy (i.e. scat, tracks) or burrows or dens that meet the dimensional criteria for kit fox. Comprehensive inspection of potential den habitat was accomplished by walking meandering transects throughout the property. No potential San Joaquin kit fox dens were observed.

**Western Burrowing Owl:** The site consists of annual grassland and ruderal grassland (Figure 5a) that is within the range of western burrowing owl. CDFW's CNDDDB contains no occurrences of western burrowing owl within 0.5 miles of the site (Figure 5b). The site was inspected for burrowing owls and ground squirrel burrows with evidence of burrowing owl occupancy (i.e., white wash, pellets, feathers). Comprehensive inspection of potential burrowing owl habitat was accomplished by walking meandering transects throughout the property. No western burrowing owls or burrows with evidence of burrowing owl occupancy were observed.

**Golden Eagle:** The site is annual grassland and ruderal grassland that is within the range of golden eagle. CDFW's CNDDDB contains no occurrences of western burrowing owl within 0.5 miles of the site (Figure 5b). Only a few of the trees depicted on Figure 5a are large enough to support golden eagle. There are also a few potential nest trees near and visible from the site that are potentially suitable. Trees in and visible from the site were inspected for raptor stick nests. No raptor stick nests were observed in the on-site trees or off-site trees visible from the site. No golden eagles were observed and this species nests more often on cliffs in remote natural areas than in trees near urban areas.

**Other Covered Species:** While there is an ephemeral stream in the site, it does not provide suitable habitat for California red-legged frog (*Rana aurora draytonii*). Similarly, the seasonal wetland swale in the site does not provide suitable habitat for California tiger salamander (*Ambystoma californiense*) or vernal pool branchiopods, which are covered species that occur in vernal pools and stock ponds. These species are discussed below, as well as a few other covered species for which there is modeled habitat in the site.

The site is within the range of California red-legged frog. The site is "potential migration and aestivation habitat" in the modeled range of California red-legged frog as mapped in Appendix D of the ECCCHCP. While the stream along the west edge of the site is mapped as potential breeding habitat for this species in Appendix D of the ECCCHCP, this 1-2 foot wide ephemeral stream (EC-2) does not provide suitable California red-legged frog breeding habitat. California red-legged frog may travel across the on-site grasslands on occasion while dispersing from off-site aquatic habitats and could potentially aestivate in the grasslands in the west part of the site. Due to periodic disking, the grasslands in the east part of the site that will be developed are not suitable for aestivating California red-legged frogs. There are no occurrences of California red-legged frog in the CNDDB (2020) within a few miles of the site.

The seasonal wetland in the site (Figure 3) is not a vernal pool. The swale has directional flow and is saturated seasonally, but surface water is present only during or shortly after rain events. This seasonal wetland feature is moderately disturbed from periodic mowing and past cultivation of orchard crops. This seasonal wetland swale does not provide suitable habitat for vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), or other special-status branchiopods.

The site is also within the range of California tiger salamander. The site is "suitable migration and aestivation habitat" in the modeled range of California tiger salamander as mapped in Appendix D of the ECCCHCP. A pond in the mine to the south of the site is mapped as potential breeding habitat for this species. Due to its hydrological regime, the seasonal wetland in the site does not provide suitable breeding habitat for California tiger salamander. Due to intensive disking, the grasslands in the portion of the site that will be developed are not suitable for California tiger salamander aestivation. There are no occurrences of California tiger salamander in the CNDDB (2020) within a few miles of the site.

While the site is also mapped in Appendix D of the ECCCHCP as potential movement habitat for Alameda whipsnake (*Masticophis lateralis euryxanthus*), it does not contain the mosaic of scrub, chaparral, grassland, and woodland habitat required by this species.

The site mapped in Appendix D of the ECCCHCP as "primary foraging habitat" for tricolored blackbird (*Agelaius tricolor*). The on-site grasslands may be used by this species for foraging.

Finally, the stream along the west edge of the site is mapped in Appendix D of the ECCCHCP as "potential movement habitat" for western pond turtle (*Emys marmorata*) and is mapped in Appendix D of the ECCCHCP as "suitable low use habitat" for foothill yellow-legged frog (*Rana boylei*). However, due to its hydrological regime, this ephemeral stream is unlikely to be used by either species.

## 9) Covered and No-Take Plants

Please check the applicable boxes in Table 2b based on the land cover types found in the project area. If suitable land cover types are present on site, surveys must be conducted using approved CDFW/USFWS methods during the appropriate season for identification of covered and no-take species (see page 6-9 of the ECCC HCP/NCCP). Reference populations of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant species is visible and detectable at the time surveys are conducted. In order to complete all the necessary covered and no-take plant surveys, spring, summer, and fall surveys may be required.

**Table 2b. Covered and No-Take Plant Species**

Plant Species	Covered (C) or No-Take (N)	Associated Land Cover Type	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period	Suitable Land Cover Type Present
Adobe navarretia ( <i>Navarretia nigelliformis</i> ssp. <i>radians</i> ) <sup>a</sup>	C	Annual Grassland	Generally found on clay barrens in Annual Grassland <sup>b</sup>	Apr–Jun	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Alkali milkvetch ( <i>Astragalus tener</i> ssp. <i>tener</i> )	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernal moist habitat in soils with a slight to strongly elevated pH	Mar–Jun	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Big tarplant ( <i>Blepharizonia plumosa</i> )	C	Annual grassland	Elevation below 1500 feet <sup>d</sup> most often on Altamont Series or Complex soils	Jul–Oct	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Brewer's dwarf flax ( <i>Hesperolinon breweri</i> )	C	Annual grassland Chaparral and scrub Oak savanna Oak woodland	Generally, restricted to grassland areas within a 500+ buffer from oak woodland and/or chaparral/scrub <sup>d</sup>	May–Jul	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Brittlescale ( <i>Atriplex depressa</i> )	C	Alkali grassland Alkali wetland	Restricted to soils of the Pescadero or Solano soil series; generally found in southeastern region of plan area <sup>d</sup>	May–Oct	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Caper-fruited tropidocarpum ( <i>Tropidocarpum capparideum</i> )	N	Alkali grassland		Mar–Apr	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Contra Costa goldfields ( <i>Lasthenia conjugens</i> )	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernal pools	Mar–Jun	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Diablo Helianthella ( <i>Helianthella castanea</i> )	C	Chaparral and scrub Oak savanna Oak woodland	Elevations generally above 650 feet <sup>d</sup>	Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Diamond-petaled poppy ( <i>Eschscholzia rhombipetala</i> )	N	Annual grassland		Mar–Apr	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Large-flowered fiddleneck ( <i>Amsinckia grandiflora</i> )	N	Annual grassland	Generally on clay soil	Apr–May	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Mount Diablo buckwheat ( <i>Eriogonum truncatum</i> )	N	Annual grassland Chaparral and scrub	Ecotone of grassland and chaparral/scrub	Apr–Sep	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Mount Diablo fairy-lantern ( <i>Calochortus pulchellus</i> )	C	Annual grassland Chaparral and scrub Oak savanna Oak woodland	Elevations generally between 650 and 2,600 <sup>d</sup>	Apr–Jun	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Mount Diablo Manzanita ( <i>Arctostaphylos auriculata</i> )	C	Chaparral and scrub	Elevations generally between 700 and 1,860 feet; restricted to the eastern and northern flanks of Mt. Diablo <sup>d</sup> and the vicinity of Black Diamond Mines	Jan–Mar	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Recurved larkspur ( <i>Delphinium recurvatum</i> )	C	Alkali grassland Alkali wetland		Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Round-leaved filaree ( <i>California macrophylla</i> ) <sup>c</sup>	C	Annual grassland		Mar–May	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
San Joaquin spearscale ( <i>Extriplex joaquiniana</i> ) <sup>e</sup>	C	Alkali grassland Alkali wetland		Apr–Oct	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Showy madia ( <i>Madia radiata</i> )	C	Annual grassland Oak savanna Oak woodland	Primarily occupies open grassland or grassland on edge of oak woodland	Mar–May	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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<sup>a</sup> The species *Navarretia nigelliformis* subsp. *nigelliformis* is no longer considered to occur within Contra Costa County based on specimen annotations at the UC and Jepson Herbaria at the University of California Berkeley as well as the opinions of experts in the genus. This taxon is now recognized as *Navarretia nigelliformis* subsp. *radians*. Any subspecies of *Navarretia nigelliformis* encountered as a part of botanical surveys in support of a PSR should be considered as covered under this HCP/NCCP.

<sup>b</sup> Habitat for the *Navarretia nigelliformis* subspecies that occurs within the inventory are is inaccurately described in the HCP/NCCP as vernal pools. The entity within the Inventory generally occupies clay barrens within Annual Grassland habitat, which is an upland habitat type.

<sup>c</sup> From California Native Plant Society. 2007. *Inventory of Rare and Endangered Plants* (online edition, v7-07d). Sacramento, CA. Species may be identifiable outside of the typical blooming period; a professional botanist shall determine if a covered or no take plant occurs on the project site. Reference population of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant is visible and detectable at the time surveys are conducted.

<sup>d</sup> See Species Profiles in Appendix D of the Final HCP/NCCP. Reference populations of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant species is visible and detectable at the time surveys are conducted.

<sup>e</sup> In the recent update to the Jepson eflora (JFP 2013) *Atriplex joaquinana* has been circumscribed and segregated into a new genus called *Extriplex* based on the work of Elizabeth Zacharias and Bruce Baldwin (2010). The etymology of the genus *Extriplex* means, “beyond or outside *Atriplex*”.

## 10) Results of Covered and No-Take Plant Species

Provide a written summary describing the results of the planning surveys conducted as required in Table 2b. Describe the methods used to survey the site for all covered and no-take plants, including the dates and times of all surveys conducted (see Tables 3-8 and 6-5 of the ECCC HCP/NCCP for covered and no-take plants), including reference populations visited prior to conducting surveys.

If any covered or no-take plant species were found, include the following information in the results summary:

- Description and number of occurrences and their rough population size.
- Description of the “health” of each occurrence, as defined on pages 5-49 and 5-50 of the HCP/NCCP.
- A map of all the occurrences.
- Justification of surveying time window, if outside of the plant’s blooming period.
- The CNDDDB form(s) submitted to CDFW (if this is a new occurrence).
- A description of the anticipated impacts that the covered activity will have on the occurrence and how the project will avoid impacts to all covered and no-take plant species. If impacts to covered plant species cannot be avoided and plants will be removed by covered activity, the Conservancy must be notified and has the option to salvage the covered plants. All projects must demonstrate avoidance of all six no-take plants (see table 6-5 of the HCP/NCCP).

### Survey Methods

Surveys for special-status plants and to assess potentially suitable habitat for special-status plants were undertaken on April 9, April 29, and July 14 2020, by botanist Jeff Glazner. The site was systematically searched for special-status plants by walking throughout the site, identifying plants as possible in the field, and collecting specimens for subsequent identification in the laboratory. The field surveys were floristic in nature with the goal of identifying species observed to the taxonomic level necessary to determine if it was a special-status species or not.

### Survey Results and Discussion

No covered or no-take plants were observed or are expected to occur in the project site. The annual grassland in the site is moderately to highly disturbed and does not provide potentially suitable habitat for any of the covered plants that occur in more natural annual grasslands in the greater project vicinity. No alkaline soils are present on the site. The seasonal wetland is also disturbed and provides very poor quality habitat for covered plants that occur in seasonal wetland habitats (i.e., alkali milkvetch and Contra Costa Goldfields). Each of the plant species identified in Table 2b as potentially occurring in annual grassland or seasonal wetland habitats is discussed below.

**Adobe (Shining) Navarretia (*Navarretia nigelliformis* ssp. *radians*)<sup>10</sup>:** This navarretia, a dicot of the Polemoniaceae family, is an annual herb native to California. It is ranked by the CNPS as 1.B.2. The herbage is

<sup>10</sup> Per Table 2B, the species *Navarretia nigelliformis* subsp. *nigelliformis* is no longer considered to occur within Contra Costa County based on specimen annotations at the UC and Jepson Herbaria at the University of California Berkeley as well as the opinions of experts in the genus. This taxon is now recognized as *Navarretia nigelliformis* subsp. *radians*.

light gray-green with branches decumbent. The corolla is included, 9–11 mm long, with lobes 1-2 mm. The on-line *Inventory of Rare and Endangered Plants* (2020) describes shining navarretia as occurring in vernal pools and clay depressions, at elevations between 492 and 3,280 feet. The site falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. There are no vernal pools in the site and other than the wetland swale, no mesic areas were observed in the site. The species was not detected during the rare plant survey.

**Alkali Milkvetch (*Astragalus tener* ssp. *tener*):** Alkali milkvetch, a dicot of the Fabaceae family, is an annual herb native and endemic to California. It is ranked by the CNPS as 1.B.2. It produces upright stems up to 30 cm tall with several lance-shaped to oval leaflets. The inflorescence is a dense cluster of pinkish-purple white-smudged flowers. The California Native Plant Society (CNPS) on-line *Inventory of Rare and Endangered Plants* (2020) describes alkali milkvetch as occurring in alkaline habitats of playas, valley and foothill grasslands in adobe clay soils, and vernal pools, at elevations up to 197 feet. It grows in both coastal and inland areas. The CNPS Inventory also describes this species as extirpated in Contra Costa County. The ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. No alkaline soil is present on the site, and the species was not detected during the rare plant survey.

**Big Tarplant (*Blepharizonia plumosa*):** Big tarweed, a dicot of the Asteraceae family, is an annual herb native and endemic to California. It is ranked by the CNPS as 1.B.1. This aromatic annual herb produces a hairy, erect stem up to 2 meters tall. The leaves are linear in shape and sometimes toothed. The inflorescence bears several flower heads, each with a fringe of up to 13 red-veined white ray florets. The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes big tarplant as occurring in valley and foothill grassland habitats (usually clay) at elevations between 98 and 1,657 feet. It grows in the Central Coast Ranges and adjacent sections of the southern San Francisco Bay Area and Central Valley. The site is not mapped in the ECCCHCP/NCCP as “Suitable Low Potential Habitat” or as “Suitable Habitat” for big tarplant although suitable habitat is mapped just to the west. It is unlikely to occur on the site, and it was not detected during the summer (July) survey.

**Brewer’s Dwarf Flax (*Hesperolinon breweri*):** Brewer’s dwarf flax, a dicot of the Linaceae family, is an annual herb native and endemic to California, where it is known from 3 counties in the San Francisco Bay Area. It is ranked by the CNPS as 1.B.2. It grows erect to a height of 5 to 20 cm. Its narrow, linear leaves are greenish to purplish in color, and it produces dense inflorescences of flowers with glandular sepals and five bright yellow petals. The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes Brewer’s dwarf flax as occurring in chaparral, cismontane woodland, and valley and foothill grasslands, usually in serpentinite soils, at elevations between 295 and 2,953 feet. The site is not mapped in the ECCCHCP/NCCP as “Suitable Low Potential Habitat” or as “Suitable Habitat” for Brewer’s dwarf flax. While the annual grassland on the site may provide potentially suitable habitat for Brewer’s dwarf flax, and the species was not detected during the rare plant survey.

**Brittlescale (*Atriplex depressa*):** Brittlescale, a dicot, is an annual herb of the Chenopodiaceae family that is native and endemic to California. It is ranked by the CNPS as 1.B.2. Brittlescale occurs on alkali soils and typically occurs in barren areas within alkali grassland, alkali meadow, and alkali scrub. The CNPS states that the species occurs in alkaline and clay soils of chenopod scrub, meadows and seeps, playas, valley and foothill grassland and vernal pools. It is occasionally found on the margins of alkali vernal pools. Brittlescale occurs along the western side of the Great Valley from Glenn County to Merced County and in the small valleys of the inner Coast Ranges, including the Livermore Valley. It occurs in the broad flood basins of the valley floor and on alluvial fans associated with the major streams draining from the inner Coast Range foothills. It is generally found at low elevations but has been collected up to 1,055 feet. Brittlescale is diminutive and generally grows prostrate; it rarely exceeds 20 centimeters in height. It blooms from April to October. The site is not mapped

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in the ECCCHCP/NCCP as “Suitable Habitat” for brittlescale, no alkaline soil is present on the site, and the species was not detected during the rare plant survey.

**Caper-fruited tropidocarpum (*Tropidocarpum capparideum*):** Caper-fruited tropidocarpum is an annual herb in the Brassicaceae (mustard) family that is native to California. It is ranked by the CNPS as 1.B.1. It occurs in alkaline soils of low hills and Valley and foothill grassland at elevation less than 1,312 feet. The species was generally considered to be extinct since the 1950s, but it has been reported since. According to CNPS, occurrences in Alameda, Contra Costa, Glenn, Santa Clara, and San Joaquin counties are presumed extirpated. Flowers are obovate to spoon-shaped, yellow, occasionally tinged purple, and the bloom period is from March to April. Habitat distribution has not been modeled for caper-fruited tropidocarpum in the ECCCHCP/NCCP. No alkaline soil is present on the site, and the species was not detected during the rare plant survey.

**Contra Costa Goldfields (*Lasthenia conjugens*):** Contra Costa goldfields, a dicot of the Asteraceae family, is an annual herb native and endemic to California, primarily in vernal pools. It is ranked by the CNPS as 1.B.1. Stems are simple or freely branched and erect attaining a height of less than 40 cm. The yellow ray flowers may number six to thirteen petals, and the five- to ten-millimeter ligules are yellow as well. The yellow disk flowers are numerous, and anther tips are linear to somewhat ovate. The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes Contra Costa goldfields as occurring in mesic habitats of cismontane woodland, alkaline playas, valley and foothill grasslands, and vernal pools at elevations up to 1,541 feet. The site falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. There are no vernal pools on the site and no suitable habitat for this species. It was not detected during the rare plant survey.

**Diablo helianthella (*Helianthella castanea*):** Diablo helianthella, a dicot, is a perennial herb of the sunflower family (Asteraceae) that is native to California and endemic to the San Francisco Bay Area, occurring in the Diablo Range, Berkeley Hills, and San Bruno Mountain. It is ranked by the CNPS as 1.B.2. It usually occurs in thin, rocky, well-drained soils, often in partial shade. According to CNPS, its habitats include broadleafed upland forest, chaparral, cismontane and riparian woodland, coastal scrub, and valley and foothill grassland. It most often occurs at elevations below 2,400 feet but it has been collected from locations as high as 3,800 feet. Diablo helianthella grows up to 18 inches tall. Its leaves are up to 6 inches long. The plant usually produces one yellow flower head per stem. Each head contains both ray flowers and disc flowers. It blooms from March to June. The ECCCHCP/NCCP model predicting where this species may occur within the plan area shows these areas to the west, south and east, but not in the study area. Diablo helianthella was not detected during the rare plant survey.

**Diamond-petaled poppy (*Eschscholzia rhombipetala*):** Diamond-petaled poppy, a dicot of the Papaveraceae family, is an annual herb native and endemic to California, growing 5-30 cm. tall. It is ranked by the CNPS as 1.B.1. Diamond-petaled California poppy may have erect or nodding buds, the flowers are small and yellow, and the bases of the leaves are fleshy. The fruits are conspicuous because they are 4 to 7 cm. long, which may nearly equal the height of the plants. The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes diamond-petaled poppy as occurring in valley and foothill grassland habitats with alkaline or clay soils, at elevations up to 3,198 feet.; the CNPS Inventory describes this species as extirpated in Contra Costa County. The site falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. No areas of alkaline or clay soils were observed in the site. While the annual grassland on the site may provide potentially suitable habitat for diamond-petaled poppy, it was not detected during the rare plant survey.

**Large-flowered fiddleneck (*Amsinckia grandiflora*):** Large-flowered fiddleneck, a dicot of the Boraginaceae family, is an annual herb native and endemic to California. It is ranked by the CNPS as 1.B.1. It is

a striking annual plant, growing to 50 cm. tall and having bright orange flowers (14-20 mm. long). The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes large-flowered fiddleneck as occurring in cismontane woodland and valley and foothill grassland habitats at elevations between 902 and 1,804 feet. The site falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. While the annual grassland in the site may provide potentially suitable habitat for large-flowered fiddleneck, the site is below the elevation range of this species, and this species was not detected during the rare plant survey.

**Mount Diablo buckwheat (*Eriogonum truncatum*):** Mount Diablo buckwheat, a dicot of the Polygonaceae family, is an annual herb native and endemic to California, known only from Mt. Diablo in Contra Costa County. It is ranked by the CNPS as 1.B.1. It grows between 150–750 millimeters high and blooms with several dozen pinkish flowers, having a maroon line down the center of each petal. The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes Mount Diablo buckwheat as occurring in sandy soils of chaparral, coastal scrub, and valley and foothill grassland habitats, at elevations between 10 and 1,148 feet. The site falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. No areas of sandy soils were observed in the site. While the annual grassland in the site may provide potentially suitable habitat for Mount Diablo buckwheat, this species was not detected during the rare plant survey.

**Mount Diablo fairy-lantern (*Calochortus pulchellus*):** Mount Diablo fairy-lantern, a monocot of the Liliaceae family, is a perennial herb (bulb) that is native and endemic to California. It is ranked by the CNPS as 1.B.2. It grows a branching stem up to about 30 cm. tall. The basal leaf is up to 40 cm. long and does not wither at flowering. The inflorescence is a solitary flower or a cluster of several flowers, which are nodding and usually spherical with all their petal tips touching. The three sepals and three petals are 2 or 3 cm long and pale to deep yellow. The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes Mount Diablo fairy-lantern as occurring in chaparral, cismontane or riparian woodland, and valley and foothill grassland habitats at elevations between 98 and 2,756 feet. In contrast, the ECCCHCP/NCCP describes this species as occurring at elevations between 650 and 2,600 feet. The site is not mapped in the ECCCHCP/NCCP as “Suitable Habitat”. While the annual grassland in the site may provide potentially suitable habitat for Mount Diablo fairy-lantern, this species was not detected during the rare plant survey.

**Mount Diablo manzanita (*Arctostaphylos auriculata*):** Mount Diablo manzanita, a dicot, is an evergreen shrub that is native and endemic to Contra Costa County, California. It is ranked by the CNPS as 1.B.3. Mount Diablo manzanita occurs primarily in chaparral (sandstone) and cismontane woodland. It can be found as an understory shrub in coast live oak woodland. It is found only on Mount Diablo and in the adjacent foothills, between 700 and 1,860 feet. Mount Diablo manzanita is generally between 1 and 4.5 meters tall with serpentine, glandless stems covered in white hair. The short, silvery leaves overlap and have deeply lobed bases. It flowers densely in white. The Mount Diablo Manzanita has no basal burl for regrowth and must propagate by seed. Its bloom period is from January to March. The site is not mapped in the ECCCHCP/NCCP as “Suitable Habitat” for Mount Diablo manzanita; furthermore, the study area is below the reported range for this species, and it was not detected during the rare plant survey.

**Recurved larkspur (*Delphinium recurvatum*).** Recurved larkspur, a perennial herb, is a member of the buttercup family (Ranunculaceae) that is native and endemic to California. It is ranked by the CNPS as 1.B.2. Recurved larkspur occurs on alkaline soils in chenopod scrub, cismontane woodland, and valley and foothill grasslands ranging in elevation from 328 to 6,562 feet. The species now appears to be very rare outside the southern San Joaquin Valley. Four occurrences are reported from the ECCCHCP/NCCP inventory area, three of which are on private land southeast of Byron. This species reaches a maximum height of about half a meter. Its deeply lobed leaves are mainly basal, with those located further up the dark purple stem being much smaller. The flowers are generally pale blue, with the sepals and lower petals darker than the upper petals.



The sepals are usually curved back, the trait which gives the plant its name. It blooms from March to June. No alkaline soils are present on the site, and the site is located below the elevational range of the species. In addition, the site is not mapped in the ECCCHCP/NCCP as "Suitable Habitat" for recurved larkspur, and the species was not detected during the rare plant survey.

**Round-leaved filaree (*California macrophylla*):** Round-leaved filaree, a dicot of the Geraniaceae family, is an annual herb native to California. It is ranked by the CNPS as CBR (Considered but Rejected) (CNPS 2020). It grows only a few centimeters high, forming a patch of slightly lobed, somewhat kidney-shaped to rounded leaves on long, slender petioles. The inflorescence is an umbel of flowers with petals around a centimeter long and white in color, often tinted pinkish or purplish. The fruit has a fuzzy base and a long, narrow style which may reach 5 cm. in length. The 2016 version of the CNPS on-line *Inventory of Rare and Endangered Plants* described round-leaved filaree as blooming from March through May and occurring in annual grassland habitats with clay soils, at elevations between 49 and 3,937 feet. The 2020 version of the *Inventory* provides no description of the species. The site is not mapped in the ECCCHCP/NCCP as "Suitable Habitat" for round-leaved filaree, and the species was not detected during the rare plant survey.

**San Joaquin spearscale (*Atriplex joaquiniana*):** San Joaquin spearscale, a dicot, is an annual herb of the Chenopodiaceae family that is native and endemic to California. It is ranked by the CNPS as 1.B.2. San Joaquin spearscale typically occurs in alkaline soils of chenopod scrub, meadows and seeps, playas and valley and foothill grassland. San Joaquin spearscale occurs along the western side of the Great Valley from Glenn County to Merced County and in the small valleys of the inner Coast Ranges, including the Livermore Valley. It occurs in the broad flood basins of the valley floor and on alluvial fans associated with the major streams draining from the inner Coast Range foothills. It is generally found at low elevations but has been collected up to 1,055 feet. It is an annual herb between 1 and 3 feet tall, blooming from April to October. According to the ECCCHCP/NCCP, "a species distribution model was developed that had the same assumptions as the model developed for brittlescale (all alkali grasslands and alkali wetlands on soils of the Pescadero or Solano soil series). Many occurrences, however, fell outside of the modeled habitat. Comparison with detailed mapping of San Joaquin spearscale populations in the Los Vaqueros Watershed (Jones & Stokes Associates 1989) showed that this species is not restricted to soils of the Solano and Pescadero soil series. Other soil series on which the species was found were too widespread to provide a useful prediction of the species' distribution in the inventory area. Therefore, the original species model was discarded." No alkaline soils are present on the site, and San Joaquin spearscale was not detected during the rare plant survey.

**Showy madia (*Madia radiata*):** Showy madia, a dicot of the Asteraceae family, is an annual herb native to California, mostly from the Central Coast Ranges and adjacent edges of the San Francisco Bay Area and Central Valley. It is ranked by the CNPS as 1.B.1. It grows upright 10 to 90 cm. tall, the stem often branching and coated in bulbous resin glands. The bristly, glandular leaves are up to 10 cm. long, often wider at the top of the plant than below. The inflorescence produces flower heads lined with hairy, gland-studded phyllaries. The head has golden yellow ray florets up to almost 2 cm, long and a center filled with many disc florets. The CNPS on-line *Inventory of Rare and Endangered Plants* (2020) describes showy madia as blooming from March through May and occurring in cismontane woodland and valley and foothill grassland habitats at elevations between 82 and 2,953 feet. The *Inventory* also describes this species as extirpated in Contra Costa County. The site falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. While the annual grassland in the site may provide potentially suitable habitat for showy madia, this species was not detected during the rare plant survey.

## IV. SPECIES-SPECIFIC AVOIDANCE AND MINIMIZATION REQUIREMENTS

Please complete and/or provide the following attachments:

### 1) Species-Specific Avoidance and Minimization for Selected Covered Wildlife

Complete the following table and check the applicable box for covered species determined by the planning surveys.

**Table 3. Summary of Applicable Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring Requirements<sup>11</sup>**

Species	Preconstruction Survey Requirements	Avoidance and Minimization Requirements	Construction Monitoring Required	Info in HCP
<input checked="" type="checkbox"/> San Joaquin kit fox	<ul style="list-style-type: none"> <li>On project footprint and 250-ft radius, map all dens (&gt;5 in. diameter) and determine status</li> <li>Provide written survey results to USFWS within 5 working days after surveying</li> </ul>	<ul style="list-style-type: none"> <li>Monitor dens</li> <li>Destroy unoccupied dens</li> <li>Discourage use of occupied (non-natal) dens</li> </ul>	<ul style="list-style-type: none"> <li>Establish exclusion zones (&gt;50 ft for potential dens, and &gt;100 ft for known dens)</li> <li>Notify USFWS of occupied natal dens</li> </ul>	pp. 6-37 to 6-38
<input checked="" type="checkbox"/> Western burrowing owl	<ul style="list-style-type: none"> <li>On project footprint and 500-ft radius, identify and map all owls and burrows, and determine status</li> <li>Document use of habitat (e.g. breeding, foraging)</li> </ul>	<ul style="list-style-type: none"> <li>Avoid occupied nests during breeding season (Feb-Sep)</li> <li>Avoid occupied burrows during nonbreeding season (Sep – Feb)</li> <li>Install one-way doors in occupied burrow (if avoidance not possible)</li> <li>Monitor burrows with doors installed</li> </ul>	<ul style="list-style-type: none"> <li>Establish buffer zones (250 ft around nests)</li> <li>Establish buffer zones (160 ft around burrows)</li> </ul>	pp. 6-39 to 6-41
<input type="checkbox"/> Giant garter snake	<ul style="list-style-type: none"> <li>Delineate aquatic habitat up to 200 ft from water's edge on each side</li> <li>Document any occurrences</li> </ul>	<ul style="list-style-type: none"> <li>Limit construction to Oct-May</li> <li>Dewater habitat April 15 – Sep 30 prior to construction</li> <li>Minimize clearing for construction</li> </ul>	<ul style="list-style-type: none"> <li>Delineate 200 ft buffer around potential habitat near construction</li> <li>Provide field report on monitoring efforts</li> <li>Stop construction activities if snake is encountered; allow snake to passively relocate</li> <li>Remove temporary fill or debris from construction site</li> <li>Mandatory training for construction personnel</li> </ul>	pp. 6-43 to 6-45
<input type="checkbox"/> California tiger salamander	<ul style="list-style-type: none"> <li>Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site</li> </ul>	<ul style="list-style-type: none"> <li>Allow agency staff to translocate species, if requested</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	p. 6-45
<input type="checkbox"/> California red-legged frog	<ul style="list-style-type: none"> <li>Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site</li> </ul>	<ul style="list-style-type: none"> <li>Allow agency staff to translocate species, if requested</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	p. 6-46
<input type="checkbox"/> Covered shrimp	<ul style="list-style-type: none"> <li>Establish presence/absence</li> <li>Document and evaluate use of all habitat features (e.g. vernal pools, rock outcrops)</li> </ul>	<ul style="list-style-type: none"> <li>Establish buffer near construction activities</li> <li>Prohibit incompatible activities</li> </ul>	<ul style="list-style-type: none"> <li>Establish buffer around outer edge of all hydric vegetation associated with habitat (50 ft or immediate watershed, whichever is larger)</li> <li>Mandatory training for construction personnel</li> </ul>	pp. 6-46 to 6-48
<input type="checkbox"/> Townsend's big-eared bat	<ul style="list-style-type: none"> <li>Establish presence/absence</li> <li>Determine if potential sites were recently occupied (guano)</li> </ul>	<ul style="list-style-type: none"> <li>Seal hibernacula before Nov</li> <li>Seal nursery sites before April</li> <li>Delay construction near occupied sites until hibernation or nursery seasons are over</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	pp. 6-36 to 6-37
<input type="checkbox"/> Swainson's hawk	<ul style="list-style-type: none"> <li>Determine whether potential nests are occupied</li> </ul>	<ul style="list-style-type: none"> <li>No construction within 1,000 ft of occupied nests within breeding season (March 15 - Sep 15)</li> <li>If necessary, remove active nest tree after nesting season to prevent occupancy in second year.</li> </ul>	<ul style="list-style-type: none"> <li>Establish 1,000 ft buffer around active nest and monitor compliance (no activity within established buffer)</li> </ul>	pp. 6-41 to 6-43
<input checked="" type="checkbox"/> Golden Eagle	<ul style="list-style-type: none"> <li>Establish presence/absence of nesting eagles</li> </ul>	<ul style="list-style-type: none"> <li>No construction within ½ mile near active nests (most activity late Jan – Aug)</li> </ul>	<ul style="list-style-type: none"> <li>Establish ½ mile buffer around active nest and monitor compliance with buffer</li> </ul>	pp. 6-38 to 6-39

<sup>11</sup> The requirements in this table are not comprehensive; they are detailed in the next section on the following page.

## 2) Required Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring

All preconstruction surveys shall be conducted in accordance with the requirements set forth in Section 6.4.3, Species-Level Measures, and Table 6-1 of the ECCC HCP/NCCP. Detailed descriptions of preconstruction surveys, avoidance and minimization, and construction monitoring applicable to each of the wildlife species in Table 3 are located below. Please remove the species-specific measures that do not apply to your project (highlight entire section and delete).

### **SAN JOAQUIN KIT FOX**

#### **Preconstruction Surveys**

Prior to any ground disturbance related to covered activities, a USFWS/CDFW– approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as supporting suitable breeding or denning habitat for San Joaquin kit fox. The surveys will establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines (U.S. Fish and Wildlife Service 1999).

Preconstruction surveys will be conducted within 30 days of ground disturbance. On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership will not be surveyed. The status of all dens will be determined and mapped. Written results of preconstruction surveys will be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance. Concurrence is not required prior to initiation of covered activities.

If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the measures described below will be implemented.

#### **Avoidance and Minimization Requirements**

- If a San Joaquin kit fox den is discovered in the proposed development footprint, the den will be monitored for 3 days by a USFWS/CDFW– approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.
- Unoccupied dens should be destroyed immediately to prevent subsequent use.
- If a natal or pupping den is found, USFWS and CDFW will be notified immediately. The den will not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFW.
- If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional 5 consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied it may be excavated under the direction of the biologist. Alternatively, if the animal is still present after 5 or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal’s normal foraging activities).

#### **Construction Monitoring**

If dens are identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances will be demarcated. The configuration of exclusion zones should be circular, with a radius measured outward from the den entrance(s). No covered activities will occur within the exclusion zones. Exclusion zone radii for potential dens will be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by kit fox.

## **WESTERN BURROWING OWL**

### **Preconstruction Surveys**

Prior to any ground disturbance related to covered activities, a USFWS/CDFW- approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995).

On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls will be identified and mapped. Surveys will take place no more than 30 days prior to construction. During the breeding season (February 1– August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted.

### **Avoidance and Minimization and Construction Monitoring**

This measure incorporates avoidance and minimization guidelines from CDFW's *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 1995).

If burrowing owls are found during the breeding season (February 1 – August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 – January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone (described below).

During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur will be established around each occupied burrow (nest site). Buffer zones of 160 feet will be established around each burrow being used during the nonbreeding season. The buffers will be delineated by highly visible, temporary construction fencing.

If occupied burrows for burrowing owls are not avoided, passive relocation will be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

## **GOLDEN EAGLE**

### **Preconstruction Survey**

Prior to implementation of covered activities, a qualified biologist will conduct a preconstruction survey to establish whether nests of golden eagles are occupied (see Section 6.3.1, *Planning Surveys*). If nests are occupied, minimization requirements and construction monitoring will be required.

### **Avoidance and Minimization**

Covered activities will be prohibited within 0.5 mile of active nests. Nests can be built and active at almost any time of the year, although mating and egg incubation occurs late January through August, with peak activity in March through July. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense

vegetation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size.

### **Construction Monitoring**

Construction monitoring will focus on ensuring that no covered activities occur within the buffer zone established around an active nest. Although no known golden eagle nest sites occur within or near the ULL, covered activities inside and outside of the Preserve System have the potential to disturb golden eagle nest sites. Construction monitoring will ensure that direct effects to golden eagles are minimized.

### **3) Construction Monitoring Plan**

Before implementing a covered activity, the applicant will develop and submit a construction monitoring plan to the planning department of the local land use jurisdiction and the East Contra Costa County Habitat Conservancy for review and approval. Elements of a brief construction monitoring plan will include the following:

- Results of planning and preconstruction surveys.<sup>12</sup>
- Description of avoidance and minimization measures to be implemented, including a description of project-specific refinements to the measures or additional measures not included in the HCP/NCCP.
- Description of monitoring activities, including monitoring frequency and duration, and specific activities to be monitored.
- Description of the onsite authority of the construction monitor to modify implementation of the activity.

Check box to acknowledge this requirement.

## **V. SPECIFIC CONDITIONS ON COVERED ACTIVITIES**

---

### **1) Check off the HCP conservation measures that apply to the project.**

#### **APPLIES TO ALL PROJECTS**

**Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Migratory Birds.** This conservation measure applies to all projects. All projects will avoid all impacts on extremely rare plants and fully protected species listed in Table 6-5 of the ECCC HCP/NCCP. See HCP pp. 6-23 to 6-25, and Table 6-5.

#### **APPLIES TO PROJECTS THAT IMPACT COVERED PLANT SPECIES**

**Conservation Measure 3.10. Plant Salvage when Impacts are Unavoidable.** This condition applies to projects that cannot avoid impacts on covered plants and help protect covered plants by prescribing salvage whenever avoidance of impacts is not feasible. Project proponents wishing to remove populations of covered plants must notify the Conservancy of their construction schedule to allow the Conservancy the option of salvaging the populations. See HCP pp. 6-48 to 6-50.

#### **APPLIES TO PROJECTS THAT INCLUDE ARE ADJACENT TO STREAMS, PONDS, OR WETLANDS**

**Conservation Measure 2.12. Wetland, Pond, and Stream Avoidance and Minimization.** All projects will implement measures described in the HCP to avoid and minimize impacts on wetlands, ponds, streams, and riparian woodland/scrub. See HCP pp. 6-33 to 6-35.

#### **APPLIES TO NEW DEVELOPMENT PROJECTS**

**Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion.** All new development must avoid or minimize direct and indirect impacts on local hydrological conditions and erosion by incorporating the applicable Provision C.3 Amendments of the Contra Costa County Clean Water Program's (CCCCWP's) amended NPDES Permit (order no. R2-2003-0022; permit no. CAS002912). The overall goal of this measure is to ensure that new development covered under the HCP has no or minimal adverse effects on downstream fisheries to avoid take of fish listed under ESA or CESA. See HCP pp. 6-21 to 6-22.

#### **APPLIES TO NEW DEVELOPMENT PROJECTS THAT INCLUDE OR ARE ADJACENT TO STREAMS, PONDS, OR WETLANDS**

---

<sup>12</sup> If the preconstruction surveys do not trigger construction monitoring, results of preconstruction surveys should still be submitted to the local jurisdiction and the East Contra Costa County Habitat Conservancy.

**Conservation Measure 1.7. Establish Stream Setbacks.** A stream setback will be applied to all development projects covered by the HCP according to the stream types listed in Table 6-2 of the HCP. See HCP pp. 6-15 to 6-18 and Table 6-2.

**APPLIES TO NEW DEVELOPMENT PROJECTS ADJACENT TO EXISTING PUBLIC OPEN SPACE, HCP PRESERVES, OR LIKELY HCP ACQUISITION SITES**

**Conservation Measure 1.6. Minimize Development Footprint Adjacent to Open Space.** Project applicants are encouraged to minimize their development footprint and set aside portions of their land to contribute to the HCP Preserve System. Land set aside that contributes to the HCP biological goals and objectives may be credited against development fees. See HCP pages 6-14 to 6-15.

**Conservation Measure 1.8. Establish Fuel Management Buffer to Protect Preserves and Property.** Buffer zones will provide a buffer between development and wildlands that allows adequate fuel management to minimize the risk of wildlife damage to property or to the preserve. The minimum buffer zone for new development is 100 feet. See HCP pages 6-18 to 6-19.

**Conservation Measure 1.9. Incorporate Urban-Wildlife Interface Design Elements.** These projects will incorporate design elements at the urban-wildlife interface to minimize the indirect impacts of development on the adjacent preserve. See HCP pp. 6-20 to 6-21.

**APPLIES TO ROAD MAINTENANCE PROJECTS OUTSIDE THE UDA**

**Conservation Measure 1.12. Implement Best Management Practices for Rural Road Maintenance.** Road maintenance activities have the potential to affect covered species by introducing sediment and other pollutants into downstream waterways, spreading invasive weeds, and disturbing breeding wildlife. In order to avoid and minimize these impacts, BMPs described in the HCP will be used where appropriate and feasible. See HCP pp. 6-25 to 6-26.

**APPLIES TO NEW ROADS OR ROAD IMPROVEMENTS OUTSIDE THE UDA**

**Conservation Measure 1.14. Design Requirements for Covered Roads Outside the Urban Development Area (UDA).** New roads or road improvements outside the UDA have impacts on many covered species far beyond the direct impacts of their project footprints. To minimize the impacts of new, expanded, and improved roads in agricultural and natural areas of the inventory area, road and bridge construction projects will adopt siting, design, and construction requirements described in the HCP and listed in Table 6-6. See HCP pp. 6-27 to 6-33 and Table 6-6.

**APPLIES TO FLOOD CONTROL MAINTENANCE ACTIVITIES**

**Conservation Measure 1.13. Implement Best Management Practices for Flood Control Facility Maintenance.** Flood control maintenance activities have the potential to affect covered species by introducing sediment and other pollutants into downstream waterways and disturbing breeding wildlife. In order to avoid and minimize these impacts, BMPs described in the HCP will be used where appropriate and feasible. See HCP pp. 6-26 to 6-27.

**2) For all checked conservation measures, describe how the project will comply with each measure. Attach as Attachment C: Project Compliance to HCP Conditions.**

## **VI. MITIGATION MEASURES**

---

**1) Mitigation Fee Calculator(s)**

Complete and attach the fee calculator (use permanent and/or temporary impact fee calculator as appropriate), and attach as **Attachment D: Fee Calculator(s)**.

**2) Briefly describe the amount of fees to be paid and when applicant plans to submit payment.**

The 8.66+/- acre site is within Fee Zone 2. Based on 2020 rates, the fees can be estimated as follows:

8.28 acres of permanent impacts at a cost of \$34,279.99 per acre = \$283,838.32

0.38 acres of urban/previously developed land a cost of \$0.00 per acre = \$0.00

**Total = \$283,838.32**

Construction is expected to commence in 2021 and continue through 2022. The fees will be paid prior to the start of construction at the current fee in place at that time.

**ATTACHMENT A: PROJECT DESCRIPTION**

# Diablo Meadows

## Project Description

July 2020

The 8.66+/- acre project site is located along the west side of Mitchell Canyon Road in Clayton, Contra Costa County, California. The site is within Section 14, in Township 1 North, Range 1 West of the USGS 7.5-minute Clayton topographic quadrangle (Figure 1).

DeNova Homes, Inc. proposes the development of 18 single-family residential units in the site, each with a home and ancillary services (Figure 2c). Access to the site will be from Mitchell Canyon Road.

The proposed project will connect to existing City infrastructure to provide sewer and water to the site. Storm water from the east part of the site will be detained in a water quality treatment basin in the northeast part of the prior to its discharge into the City's storm drain system (Figure 2d). Storm water from the west part of the subdivision will be detained in a second water quality treatment basin along the north edge of site and will be discharged on the hillside adjacent to the on-site wetland swale.

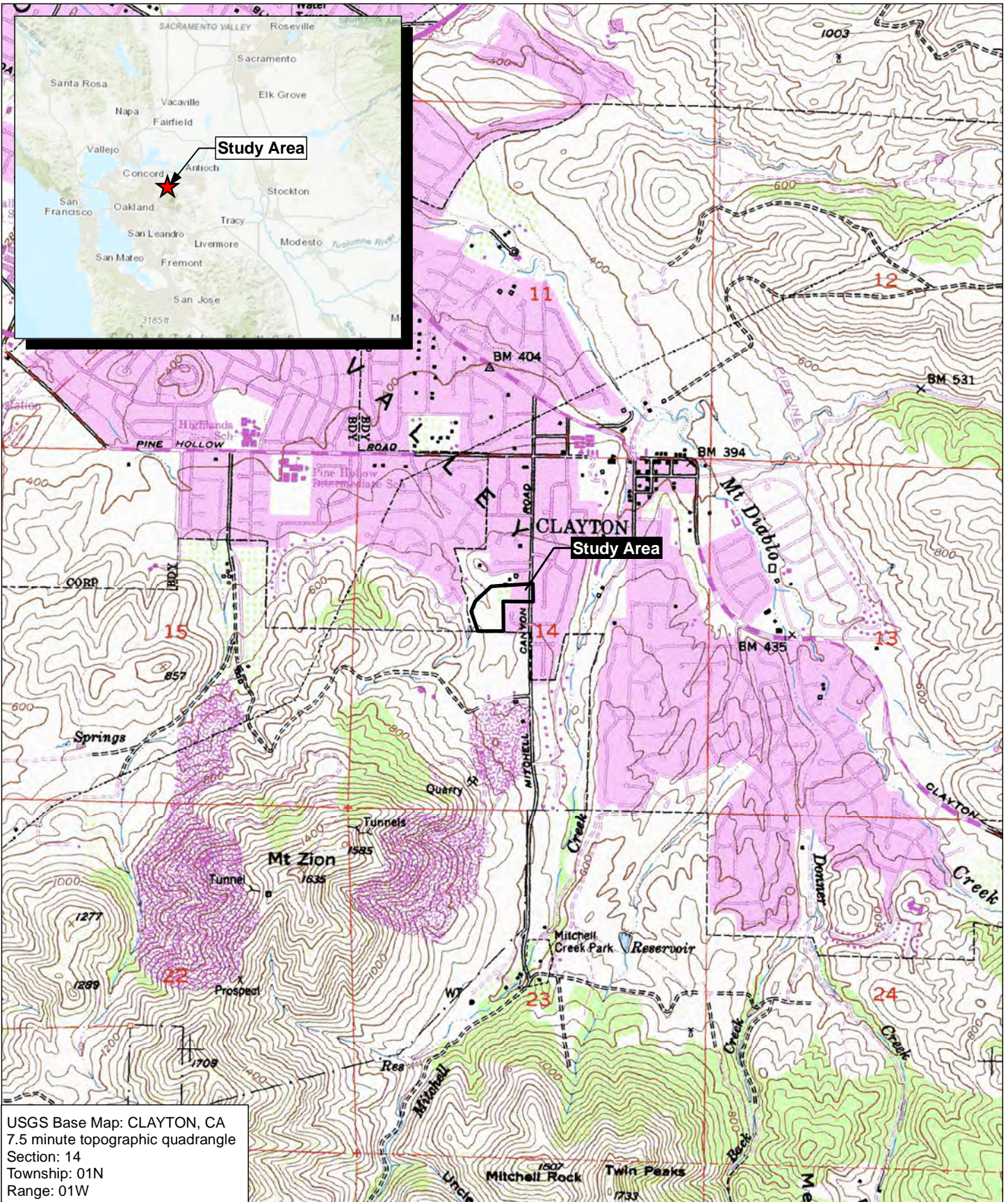
The project includes approximately 4 acres of land will remain in open space, including the ephemeral creeks and adjacent 25+/-foot stream setback lands. The open space areas also contain the entire seasonal wetland swale in the site and adjacent lands extending 25 feet or more upslope of the seasonal wetland (Figure 2e)

Standard construction best management practices (BMPs) will be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs will include use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydrolmulch.

Construction is expected to begin 2021 and is expected to continue through 2022.



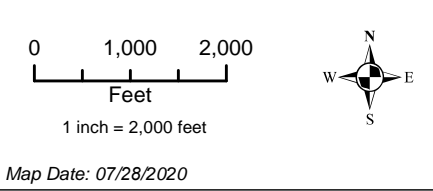
**ATTACHMENT B: FIGURES**



USGS Base Map: CLAYTON, CA  
 7.5 minute topographic quadrangle  
 Section: 14  
 Township: 01N  
 Range: 01W

**Figure 1**

Moore Biological  
 Consultants



Site Map/USGS

**Diablo Meadows**

City of Clayton, Contra Costa County, CA

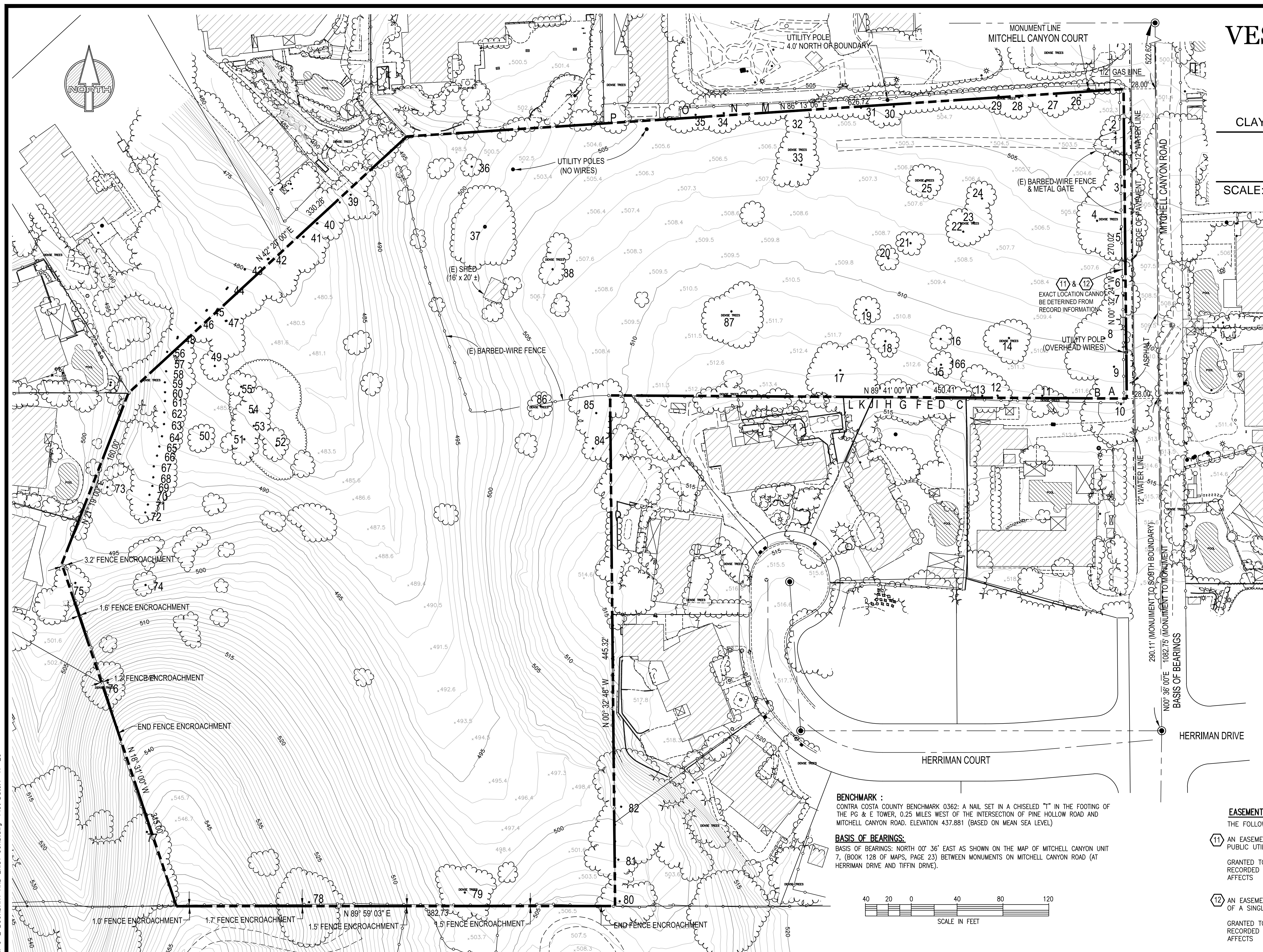
C:\Users\owner\Documents\FEC\_INC\Projects\Diablo\_Canyon\MXD\diablo\_canyon\_section\_figure\_1.mxd



**VESTING TENTATIVE MAP**  
 FOR  
**SUBDIVISION 9536**  
**DIABLO MEADOWS**  
 CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA  
**BOUNDARY**  
**AND EXISTING CONDITION**

SCALE: AS SHOWN

APRIL, 2020



**LEGEND & ABBREVIATIONS**

	PROPERTY BOUNDARY		FOUND STANDARD CITY STREET MONUMENT
	RIGHT OF WAY		FOUND SURVEY MONUMENT AS NOTED
	EASEMENT		MANHOLE (TYPE AS NOTED)
	STORM DRAIN LINE		CATCH BASIN (ADJACENT TO MANHOLE TYPICAL)
	SEWER LINE		CATCH BASIN(S)
	FOUND STANDARD CITY STREET MONUMENT		WATER VALVE
	FOUND SURVEY MONUMENT AS NOTED		STREET LIGHT (PRIVATE)
	MANHOLE (TYPE AS NOTED)		STREET LIGHT (PUBLIC)
	CATCH BASIN (ADJACENT TO MANHOLE TYPICAL)		UTILITY BOX/VAULT (TYPE AS NOTED)
	CATCH BASIN(S)		TREE TRUNK LOCATION (SEE ARBORIST REPORT)
	WATER VALVE		SIGN
	STREET LIGHT (PRIVATE)		
	STREET LIGHT (PUBLIC)		
	UTILITY BOX/VAULT (TYPE AS NOTED)		
	TREE TRUNK LOCATION (SEE ARBORIST REPORT)		
	SIGN		

BFP	BACKFLOW PREVENTER	JP	POWER POLE (JOINT SERVICE)
C	CONCRETE	SD	STORM DRAIN
CB	CATCH BASIN (STORM DRAIN INLET)	SDMH	STORM DRAIN MANHOLE
CO	CLEANOUT	SF	SQUARE FEET
DWY	DRIVEWAY	SL	STREET LIGHT
E	ELECTRICAL (PG&E)	SS	SANITARY SEWER
(E)	EXISTING	SSMH	SANITARY SEWER MANHOLE
F	FIRE (WATER) SERVICE LINE	T	TELEPHONE (COMMUNICATIONS, SBC, PG&E)
FDC	FIRE DEPARTMENT CONNECTION	W	WATER MAIN
FH	FIRE HYDRANT	WM	WATER METER
G	GAS	WV	WATER VALVE
GV	GAS VALVE		

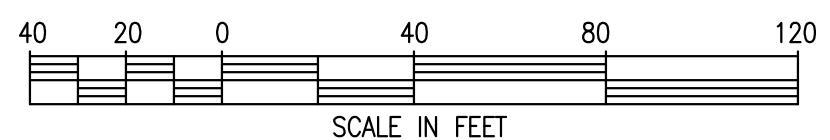
**EASEMENTS** (NUMBERING AND LANGUAGE CORRESPONDS WITH THE TITLE REPORT)  
 THE FOLLOWING EASEMENTS AFFECT PARCEL 1:

**11** AN EASEMENT FOR CONSTRUCTION, INSTALLATION, MAINTENANCE, REPAIR AND OPERATION OF PUBLIC UTILITIES AND INCIDENTAL PURPOSES.

GRANTED TO : PACIFIC TELEPHONE AND TELEGRAPH COMPANY  
 RECORDED : SEPTEMBER 16, 1914 IN BOOK 227 OF DEEDS, PAGE 283  
 AFFECTS : THE NORTHWEST 1/4 OF SECTION 14 (DESCRIBES THE WHOLE PROPERTY; EXISTING LINES ARE LOCATED ALONG THE MITCHELL CANYON ROAD RIGHT OF WAY)

**12** AN EASEMENT FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, REPAIR AND OPERATION OF A SINGLE LINE OF POLES, TELEPHONE AND TELEGRAPH LINES AND INCIDENTAL PURPOSES.

GRANTED TO : VALLEY PIPE LINE COMPANY, A CALIFORNIA CORPORATION  
 RECORDED : MAY 20, 1915 IN BOOK 241 OF DEEDS, PAGE 331  
 AFFECTS : A PORTION OF THE NORTHWEST 1/4 OF SECTION 14 (DESCRIBES THE WHOLE PROPERTY; EXISTING LINES ARE LOCATED ALONG THE MITCHELL CANYON ROAD, RIGHT OF WAY)



DATE: MARCH, 2020			
SCALE:			
DRAWN: TJB/YPS			
DESIGNED: HK/TB			
ENGINEER: JR/YS			
MANAGER: HK			
NO.	BY	DATE	REVISIONS

PREPARED BY, OR UNDER THE DIRECTION OF:

**MERIDIAN ASSOCIATES, INC.**  
 CIVIL ENGINEERING • PLANNING • SURVEYING  
 1300A WILLOW PASS COURT, CONCORD, CA 94520  
 PHONE: 925-691-7300 FAX: 925-691-7110

**DeNova Homes**  
 1500 WILLOW PASS COURT, CONCORD, CA 94520  
 PHONE 925-685-0110 FAX 925-685-0660

SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS  
**BOUNDARY AND EXISTING CONDITION**  
 CLAYTON CONTRA COSTA COUNTY CALIFORNIA

SHEET NO. **C-2** OF 6 SHEETS  
 JOB NO. 18-16-00

M:\Jobs\18-16-00\TM C-2 BOUNDARY AND EXIST COND.dwg Plot Date: 7-17-20

FIGURE 2B. BOUNDARY AND EXISTING CONDITION

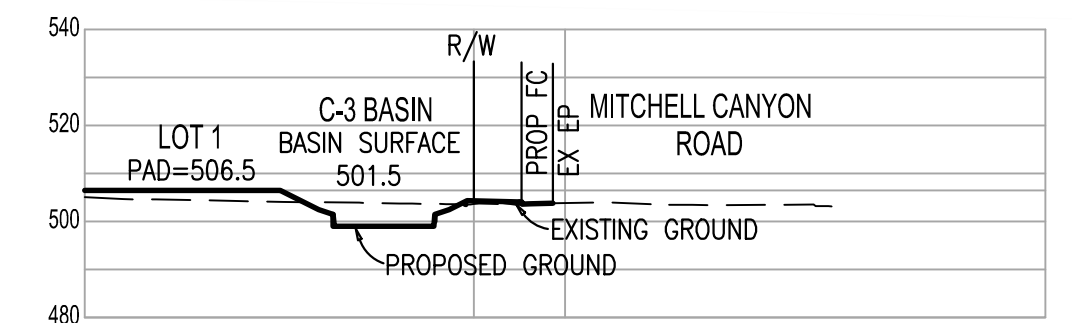
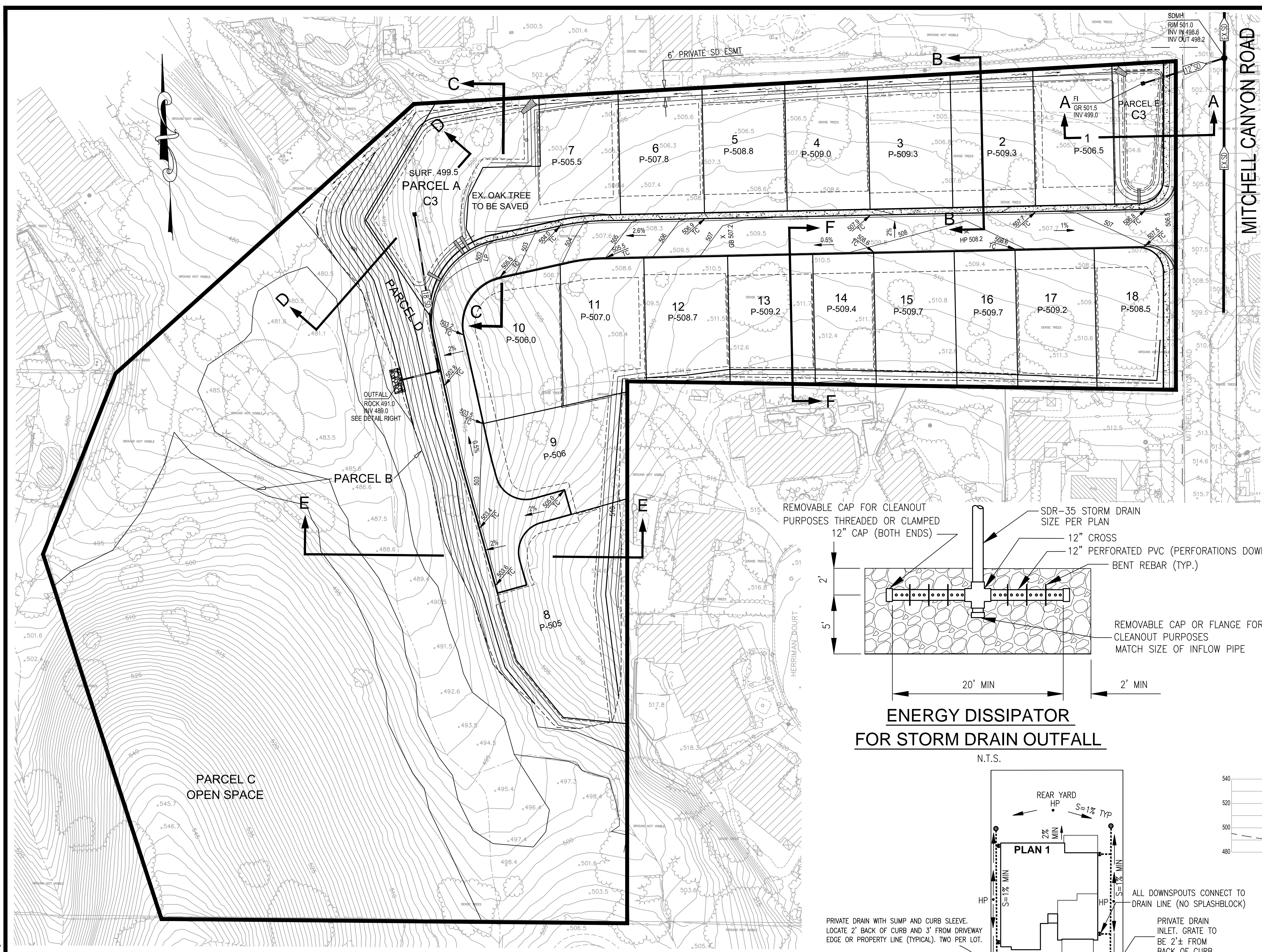
# VESTING TENTATIVE MAP FOR SUBDIVISION 9536 DIABLO MEADOWS

CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA

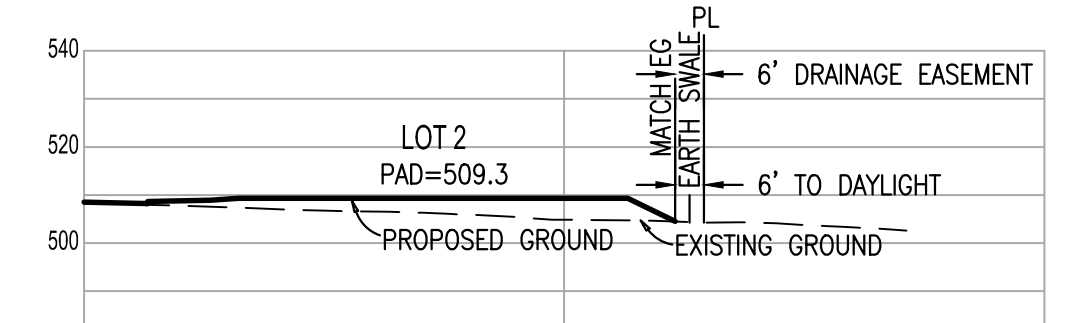
## PRELIMINARY GRADING AND DRAINAGE PLAN

SCALE: AS SHOWN

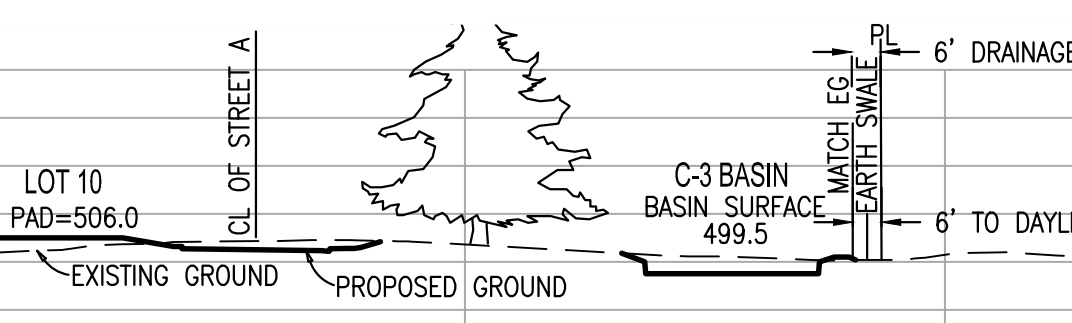
APRIL, 2020



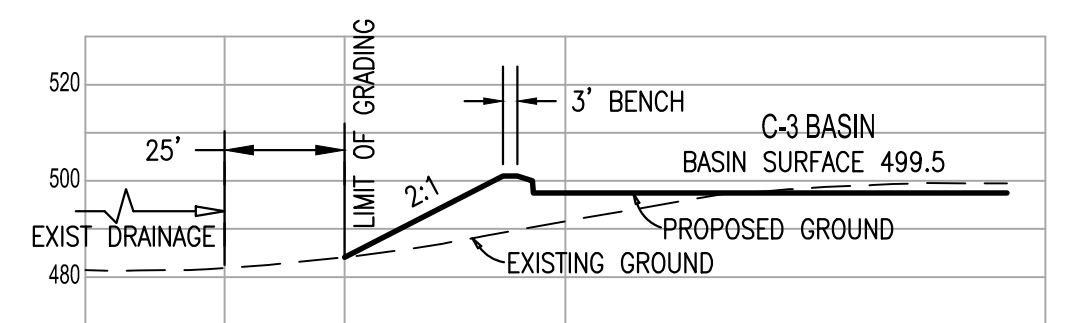
SECTION A-A



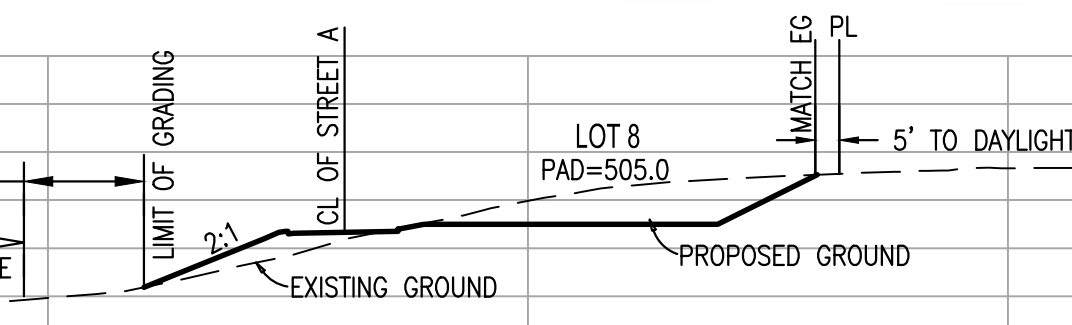
SECTION B-B



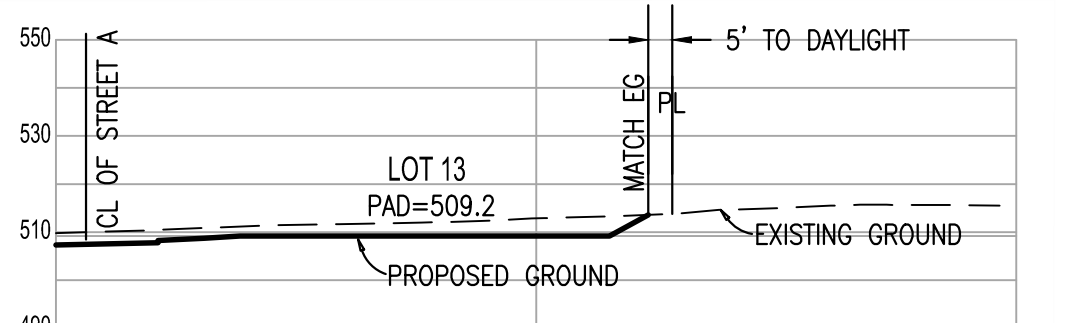
SECTION C-C



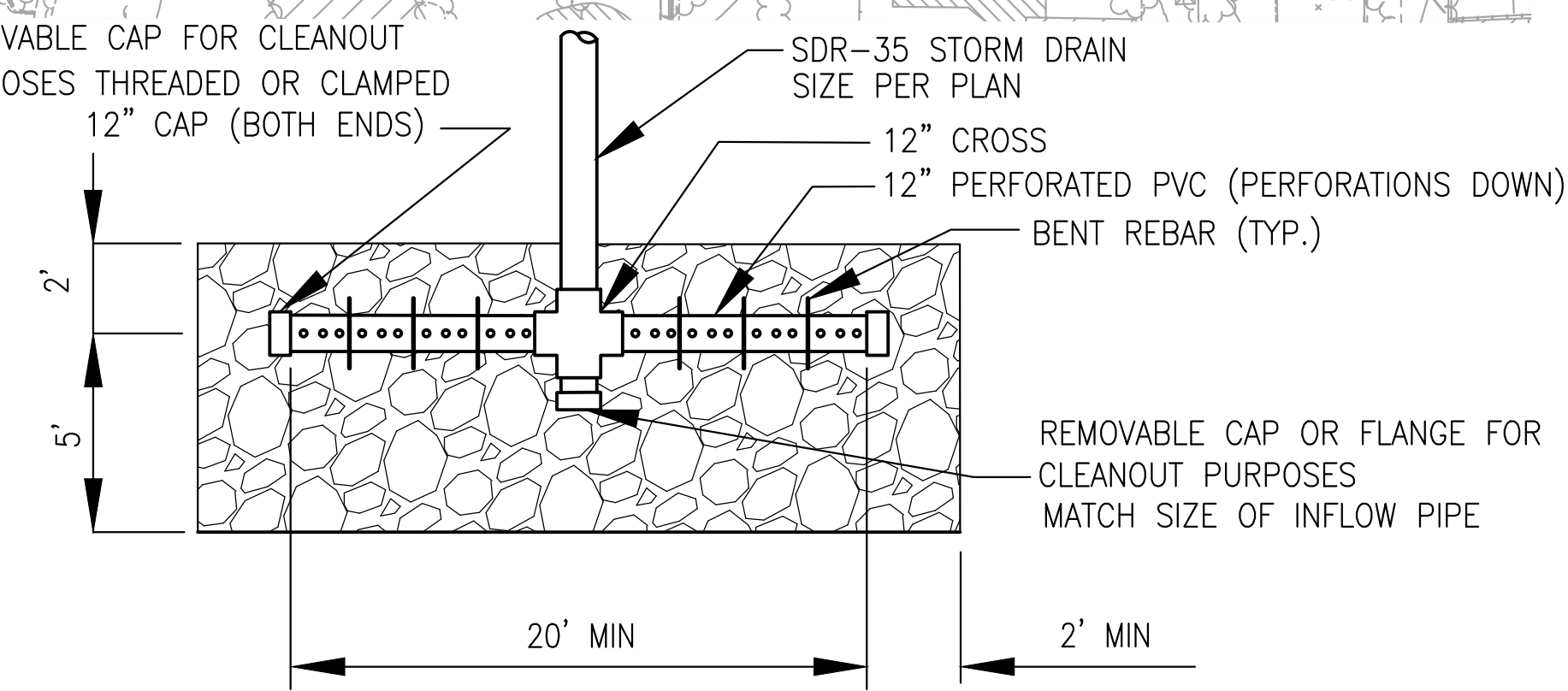
SECTION D-D



SECTION E-E

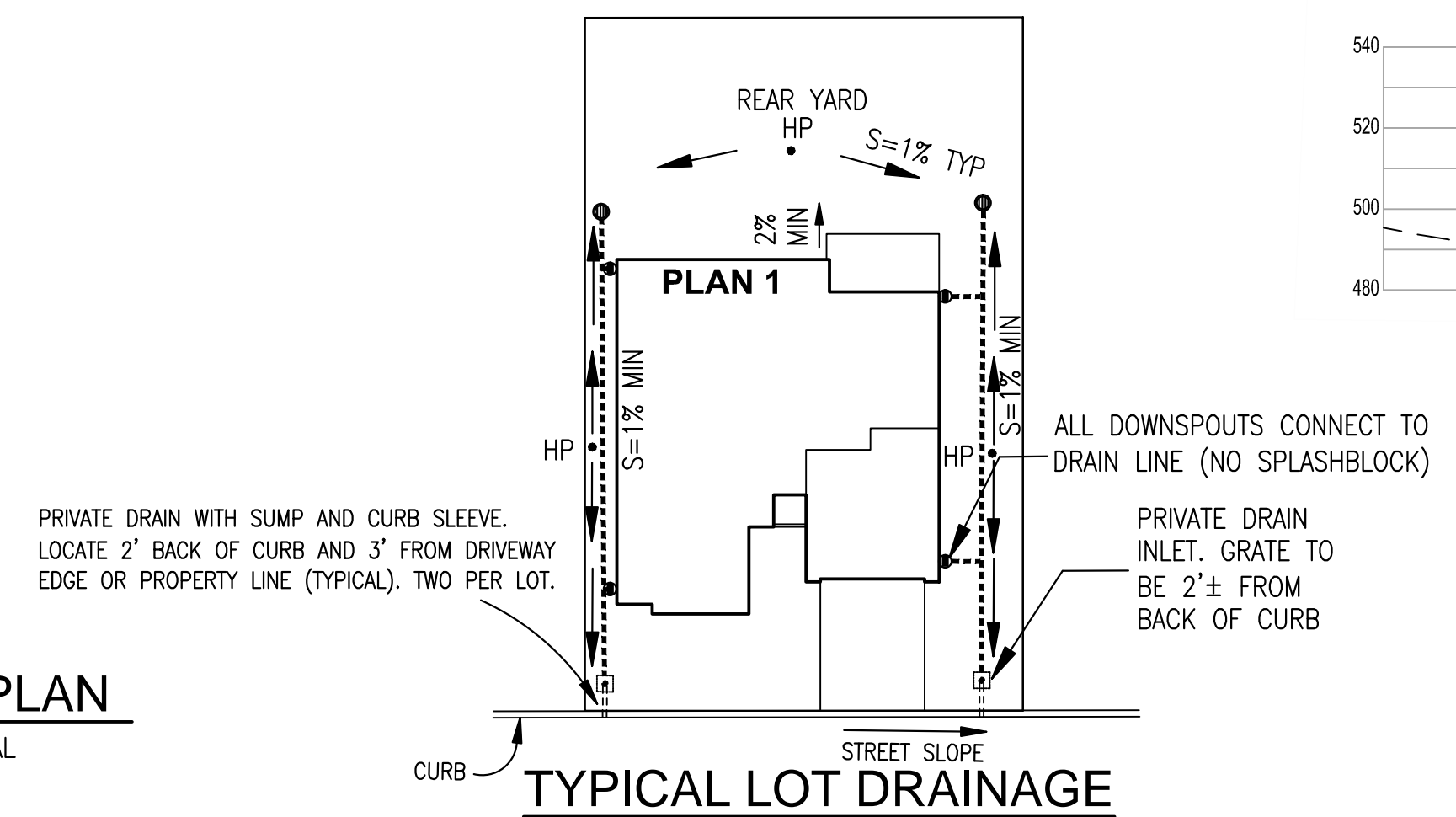


SECTION F-F



ENERGY DISSIPATOR  
FOR STORM DRAIN OUTFALL

N.T.S.



TYPICAL LOT DRAINAGE

GRADING & DRAINAGE PLAN  
SCALE: 1" = 40' HORIZONTAL & VERTICAL

DATE: MARCH, 2020	NO.	BY	DATE	REVISIONS
SCALE:				
DRAWN: TJB/YPS				
DESIGNED: HK/TB				
ENGINEER: JR/YYS				
MANAGER: HK				

PREPARED BY, OR UNDER THE DIRECTION OF:

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CIVIL ENGINEERING • PLANNING • SURVEYING  
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CONCORD, CA 94520  
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FAX: 925-691-7110

**DeNova Homes**  
1500 WILLOW PASS COURT, CONCORD, CA 94520  
PHONE 925-685-0110 FAX 925-685-0660

SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS

## PRELIMINARY GRADING & DRAINAGE PLAN

CLAYTON CONTRA COSTA COUNTY CALIFORNIA

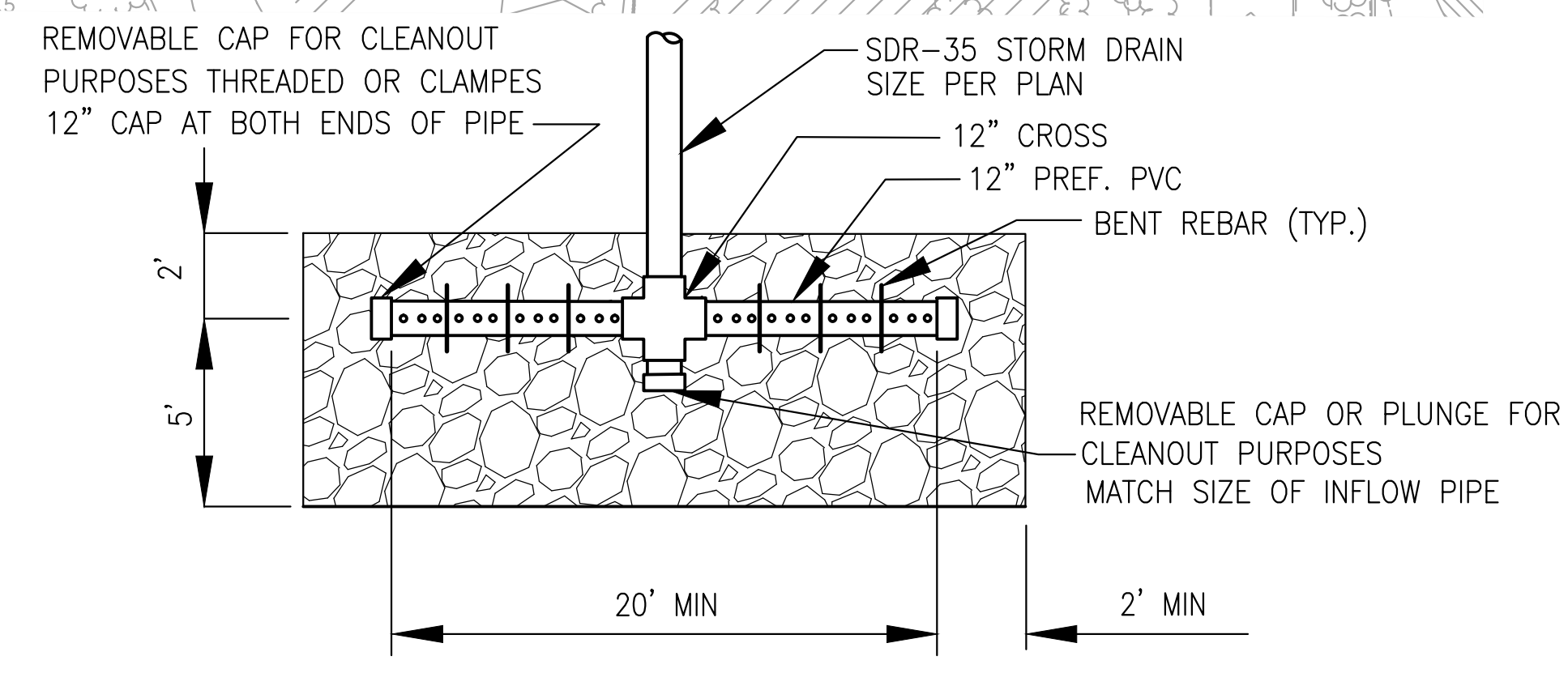
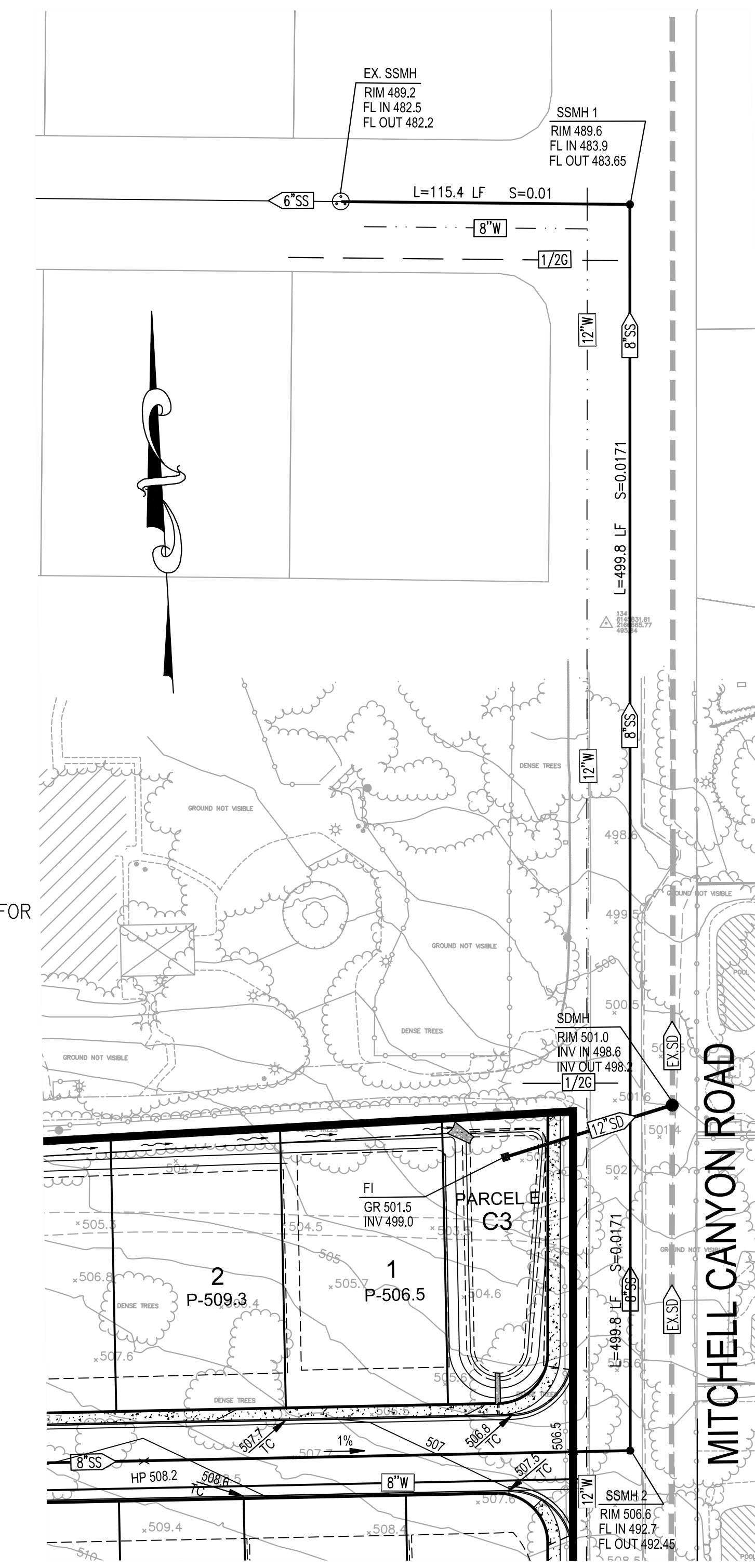
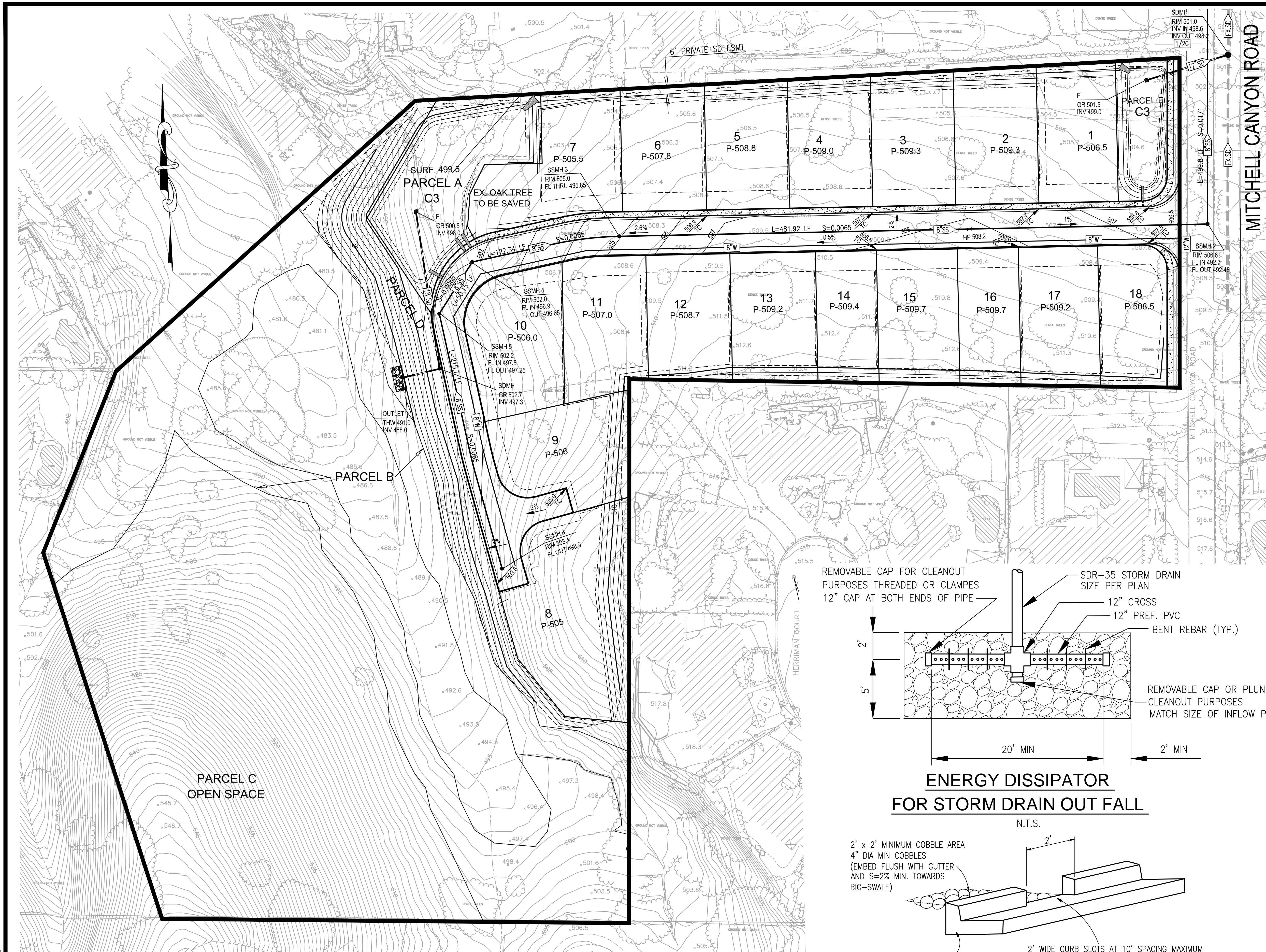
SHEET NO. **C-3**  
OF 6 SHEETS  
JOB NO. 18-16-00

FIGURE 2C. PRELIMINARY GRADING AND DRAINAGE PLAN

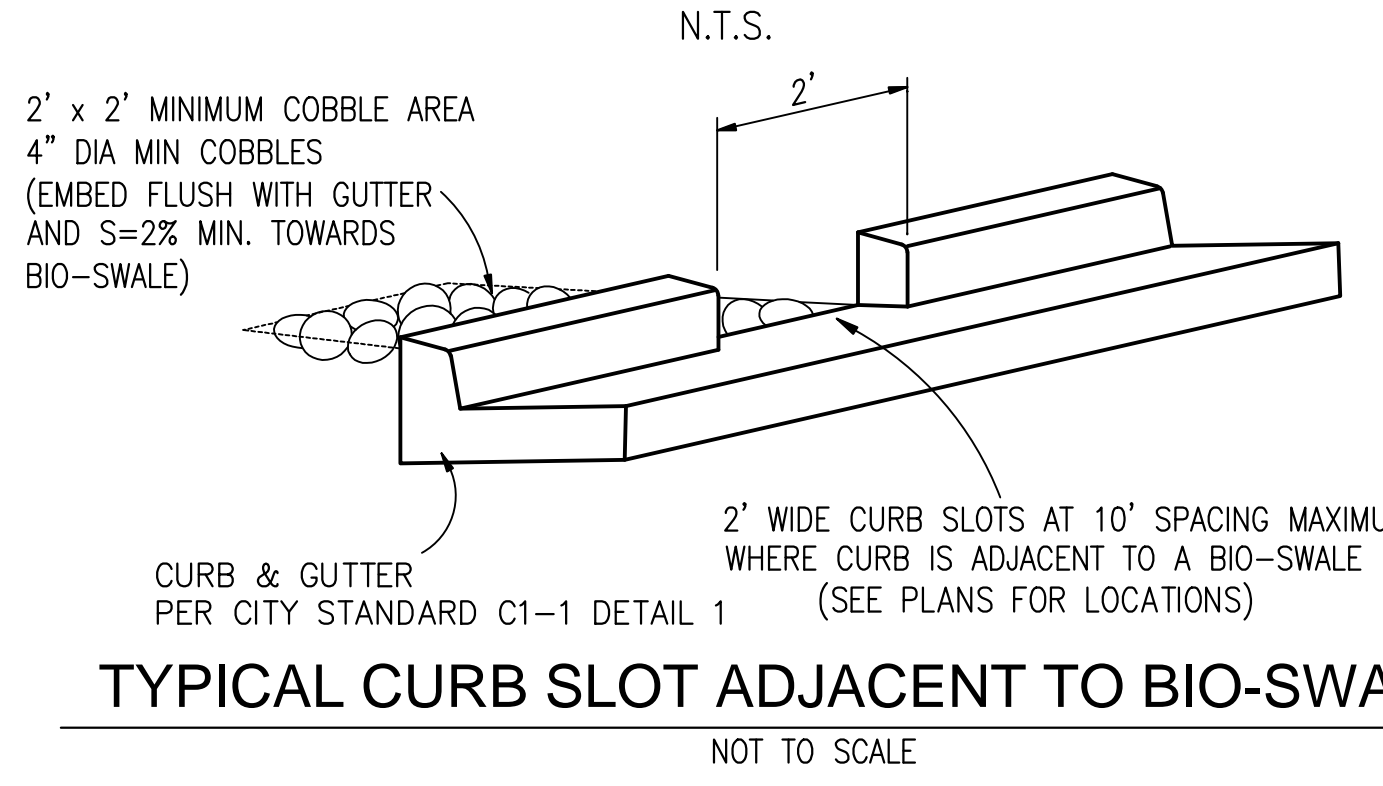
**VESTING TENTATIVE MAP**  
 FOR  
**SUBDIVISION 9536**  
**DIABLO MEADOWS**  
 CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA  
**PRELIMINARY UTILITY PLAN**

SCALE: AS SHOWN

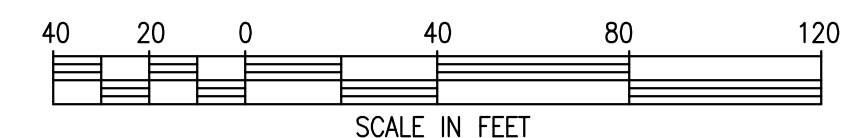
APRIL, 2020



**ENERGY DISSIPATOR FOR STORM DRAIN OUT FALL**

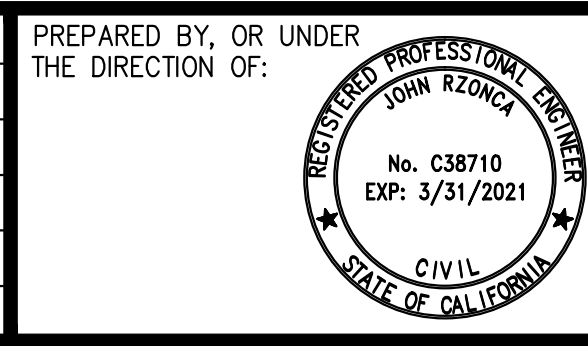


**TYPICAL CURB SLOT ADJACENT TO BIO-SWALES**



**PRELIMINARY UTILITY PLAN**  
 SCALE: 1" = 40'

DATE: MARCH, 2020			
SCALE:			
DRAWN: TJB/YPS			
DESIGNED: HK/TB			
ENGINEER: JR/YS			
MANAGER: HK			
	NO.	BY	DATE
			REVISIONS



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SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS  
**PRELIMINARY UTILITY PLAN**  
 CLAYTON CONTRA COSTA COUNTY CALIFORNIA

SHEET NO. **C-4**  
 OF 6 SHEETS  
 JOB NO. 18-16-00

FIGURE 2D. PRELIMINARY UTILITY PLAN

M:\Jobs\18-16-00\TM\C-4 UTILITY.dwg Plot Date: 7-17-20

# VESTING TENTATIVE MAP FOR SUBDIVISION 9538 DIABLO MEADOWS

CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA  
**PRELIMINARY DEVELOPMENT PLAN**  
SCALE: AS SHOWN APRIL, 2020

### SUMMARY OF PRODUCT TYPE & SETBACKS

PLAN TYPE	NUMBER OF UNITS	MINIMUM SETBACKS			
		FRONT		SIDES	REAR
		LIVING AREA	GARAGE		
1	3	10'	20'	5'/5'	15'
2	7	10'	20'	5'/10'	15'
3	8	10'	20'	5'/10'	15'
<b>TOTAL</b>	<b>18</b>				

### PARKING SUMMARY

PARKING TYPE	NUMBER OF SPACES
*ON STREET	15
DRIVEWAY	36
GARAGE	36
<b>TOTAL</b>	<b>87</b>

\* PARALLEL PARKING DIMENSION IS 8'x22'

### PARCEL AREAS

PARCEL	AREA	USE
A	0.28 AC	C3 BASIN
B	2.02 AC	EXIST. DRAINAGE AREA
C	1.91 AC	OPEN SPACE
D	0.43 AC	OPEN SPACE
E	0.11 AC	C3 BASIN
LOTS 1-18	3.19 AC	SINGLE FAMILY
STREET R/W	0.74 AC	
<b>TOTAL</b>	<b>8.68 AC</b>	

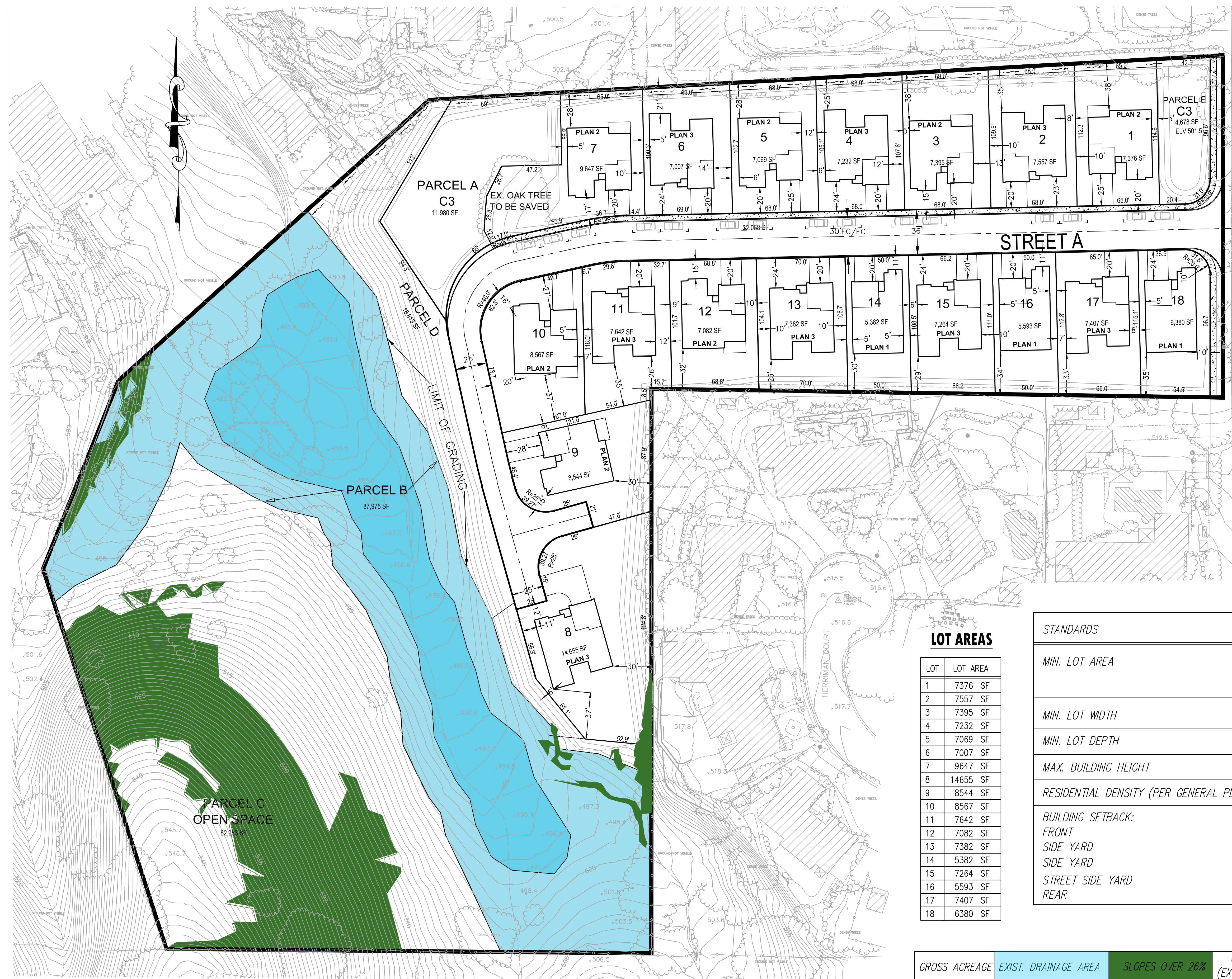
### DEVELOPMENT STANDARDS

STANDARDS	EXIST. R-15	PROPOSED (REZONE)
MIN. LOT AREA	15,000 SQ. FT.	5,000 SQ. FT (LOTS 14, 16 & 18) 7,000 SQ. FT (LOTS 1-13, 15 & 17) 7,741 SQ. FT. (AVG)
MIN. LOT WIDTH	100'	50' (LOTS 14, 16 & 18 ONLY) TYPICAL LOT WIDTH APPROX. 65'
MIN. LOT DEPTH	100'	90' (TYPICAL LOT DEPTH APPROX. 100')
MAX. BUILDING HEIGHT	35'	35'
RESIDENTIAL DENSITY (PER GENERAL PLAN)	3.1-5.0 DU/NET ACRE (MD)	3.90 DU/NET ACRE
BUILDING SETBACK: FRONT SIDE YARD SIDE YARD STREET SIDE YARD REAR	20' 10' MIN., 25' AGGREGATE 10' MIN., 25' AGGREGATE 20' 15'	20' GAR / 10' LIVING AREA (VARIES BETWEEN 11'-24') 5' MIN., 10' AGGREGATE (LOTS 14, 16 & 18) 5' MIN., 15' AGGREGATE (LOTS 1-13, 15 & 17) 10' 15' (TYPICAL REAR SETBACK/YARD IS GREATER THAN 20')

### PUD DENSITY TABLE

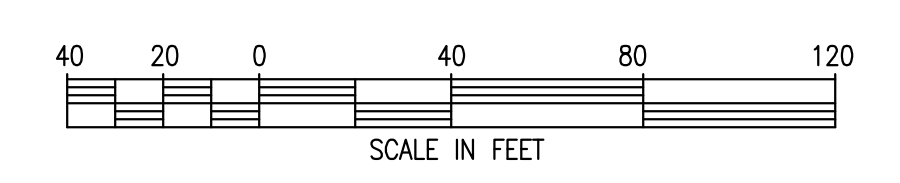
GROSS ACREAGE	EXIST. DRAINAGE AREA	SLOPES OVER 26%	OPEN SPACE PARCEL C (EXCLUDING SLOPES OVER 26%)	*NET ACREAGE	NO. OF UNITS	DU/GROSS ACRE	DU/*NET ACRE
8.68± AC	2.02± AC	0.87± AC	1.17± AC	*4.62± AC	18	DU/AC	3.9 DU/AC

\* NET ACREAGE INCLUDES STREETS, OPEN SPACE PARCEL D (AREAS LESS THAN 26% SLOPE), AND C-3 BASINS  
AREAS PER MUNI CODE 17.22



### LOT AREAS

LOT	LOT AREA
1	7376 SF
2	7557 SF
3	7395 SF
4	7232 SF
5	7069 SF
6	7007 SF
7	9647 SF
8	14655 SF
9	8544 SF
10	8567 SF
11	7642 SF
12	7082 SF
13	7382 SF
14	5382 SF
15	7264 SF
16	5593 SF
17	7407 SF
18	6380 SF



### PRELIMINARY DEVELOPMENT PLAN

SCALE: 1" = 40'

DATE: MARCH, 2020			
SCALE:			
DRAWN: TJB/YPS			
DESIGNED: HK/TB			
ENGINEER: JR/YYS			
MANAGER: HK			
NO.	BY	DATE	REVISIONS

PREPARED BY, OR UNDER THE DIRECTION OF:

**MERIDIAN ASSOCIATES, INC.**  
CIVIL ENGINEERING • PLANNING • SURVEYING  
1300A WILLOW PASS COURT, CONCORD, CA 94520  
PHONE: 925-691-7300 FAX: 925-691-7110

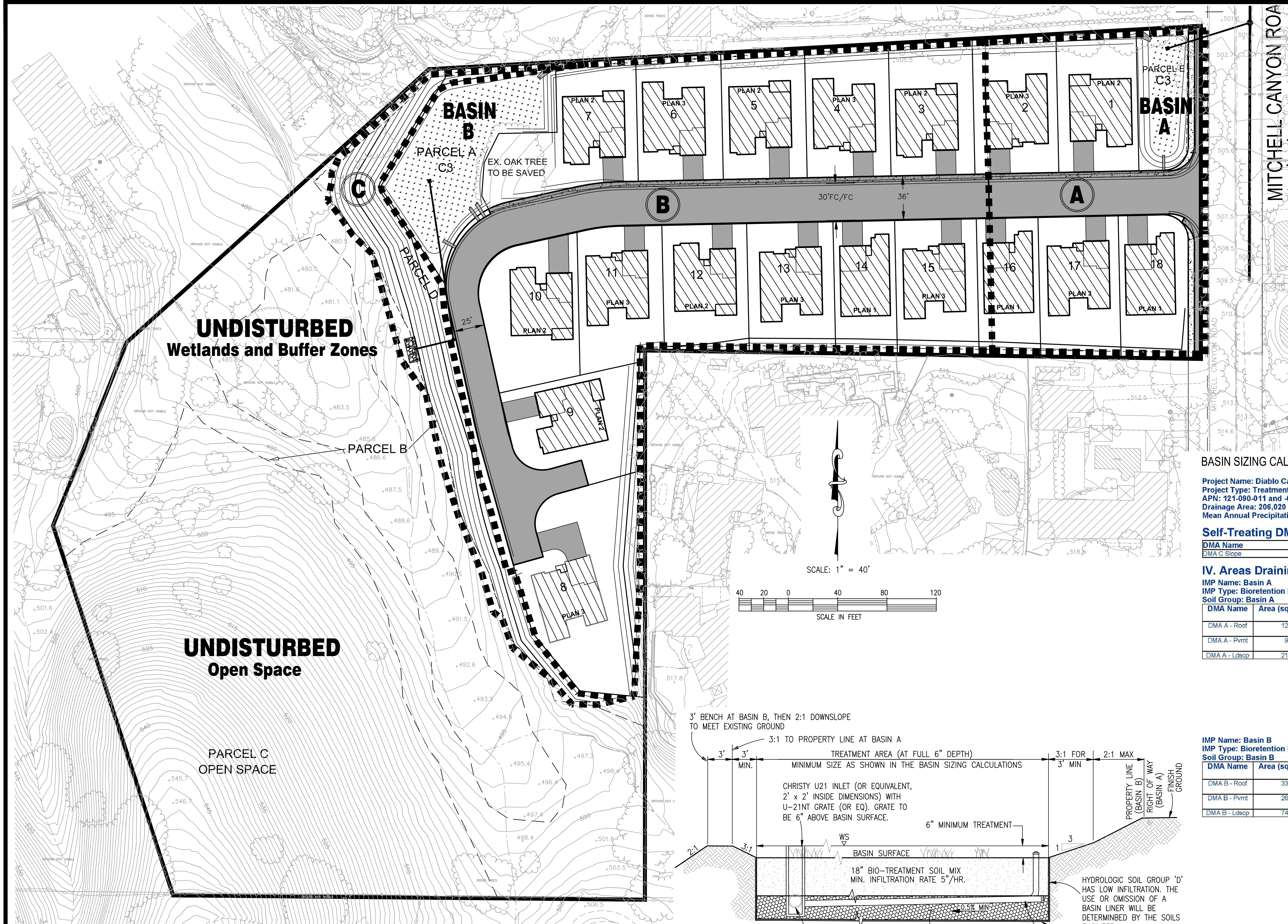
**DeNova Homes**  
1500 WILLOW PASS COURT, CONCORD, CA 94520  
PHONE 925-685-0110 FAX 925-685-0660

SUBDIVISION 9538 TENTATIVE MAP DIABLO MEADOWS  
**PRELIMINARY DEVELOPMENT PLAN**  
CLAYTON CONTRA COSTA COUNTY CALIFORNIA

SHEET NO. **C-5**  
OF 6 SHEETS  
JOB NO. 18-16-00

FIGURE 2E. PRELIMINARY DEVELOPMENT PLAN

**VESTING TENTATIVE MAP**  
 FOR  
**SUBDIVISION 9536**  
**DIABLO MEADOWS**  
 CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA  
**STORMWATER CONTROL PLAN**  
 SCALE: AS SHOWN APRIL, 2020



- LEGEND**
- (A)** DRAINAGE MANAGEMENT AREA (DMA)
  - DMA BOUNDARY
  - PAVEMENT
  - ▨ ROOFTOPS (INCLUDES WALKS AND PATIOS)
  - LANDSCAPE (NO HATCH)
  - ⋯ RETENTION AREA (BASIN)

**BASIN SIZING CALCULATIONS**

Project Name: Diablo Canyon  
 Project Type: Treatment and Flow Control  
 APN: 121-090-011 and -016  
 Drainage Area: 206,020  
 Mean Annual Precipitation: 18.7

**Self-Treating DMAs**

DMA Name	Area (sq ft)
DMA C Slope	17,690.0

**IV. Areas Draining to IMPs**

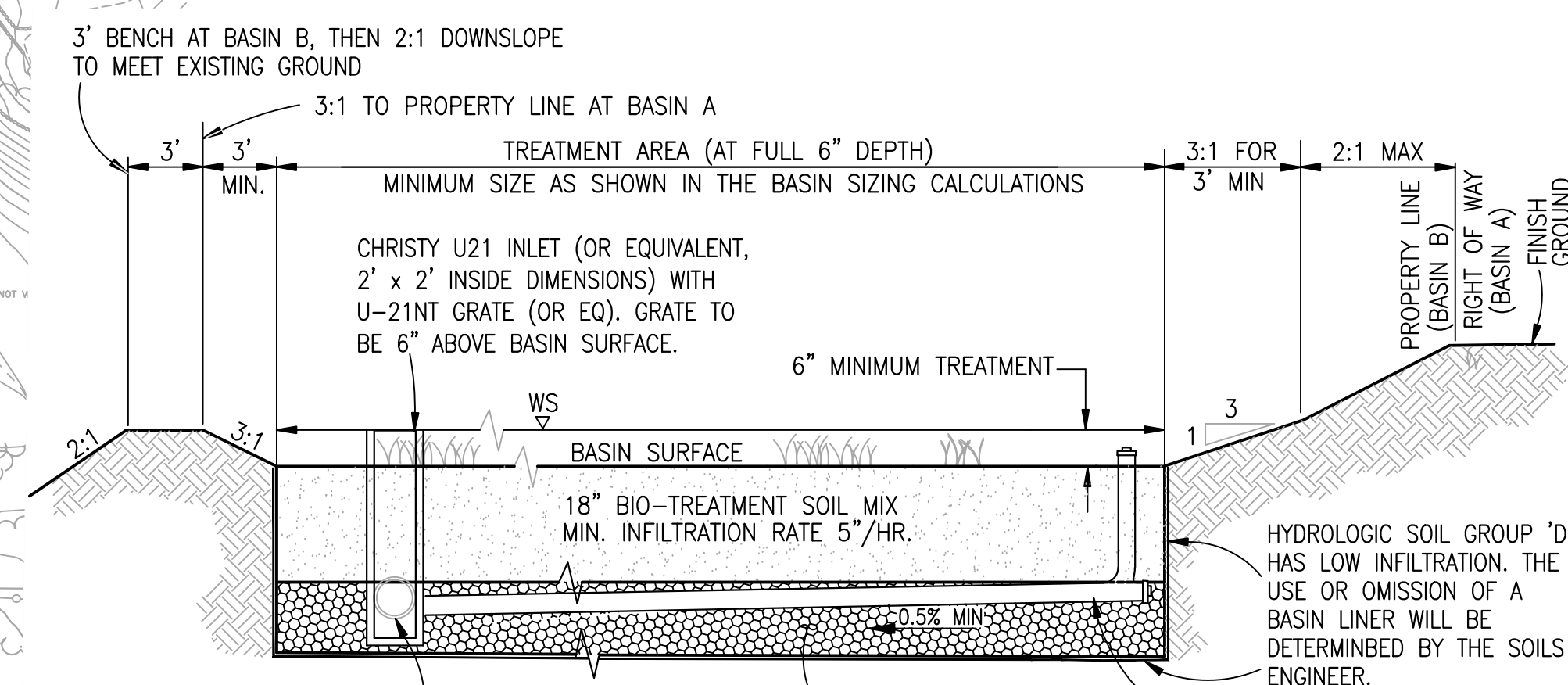
IMP Name: Basin A  
 IMP Type: Bioretention Facility  
 Soil Group: Basin A

DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
DMA A - Roof	12,730	Conventional Roof	1.00	12,730				
DMA A - Pymt	9,410	Concrete or Asphalt	1.00	9,410				
DMA A - Ldscp	21,230	Landscape	0.70	14,861				
<b>Total</b>				<b>37,001</b>				
				<b>Area</b>	0.050	1.066	1,972	1,980
				<b>Surface Volume</b>	0.042	1.066	1,657	1,660
				<b>Subsurface Volume</b>	0.055	1.066	2,169	2,180
							<b>Maximum Underdrain Flow (cfs) Orifice Diameter (in)</b>	0.07
								1.73

IMP Name: Basin B  
 IMP Type: Bioretention Facility  
 Soil Group: Basin B

DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
DMA B - Roof	33,610	Conventional Roof	1.00	33,610				
DMA B - Pymt	26,710	Concrete or Asphalt	1.00	26,710				
DMA B - Ldscp	74,770	Landscape	0.70	52,339				
<b>Total</b>				<b>112,659</b>				
				<b>Area</b>	0.050	1.066	6,005	7,870
				<b>Surface Volume</b>	0.042	1.066	5,044	5,050
				<b>Subsurface Volume</b>	0.055	1.066	6,605	6,620
							<b>Maximum Underdrain Flow (cfs) Orifice Diameter (in)</b>	0.23
								3.06

**PLAN VIEW**  
 SCALE: 1" = 40'



**BIORETENTION BASIN - TYPICAL SECTION**  
 NOT TO SCALE

**SWCP FIGURE A**

DATE: MARCH, 2020			
SCALE:			
DRAWN: TJB/YPS			
DESIGNED: HK/TB			
ENGINEER: JR/YYS			
MANAGER: HK			
NO.	BY	DATE	REVISIONS

PREPARED BY, OR UNDER THE DIRECTION OF:

**MERIDIAN ASSOCIATES, INC.**  
 CIVIL ENGINEERING • PLANNING • SURVEYING  
 1300A WILLOW PASS COURT  
 CONCORD, CA 94520  
 PHONE: 925-691-7300  
 FAX: 925-691-7110

**DeNova Homes**  
 1500 WILLOW PASS COURT, CONCORD, CA 94520  
 PHONE 925-685-0110 FAX 925-685-0660

SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS SHEET NO. **C-6** OF 6 SHEETS  
**PRELIMINARY STORMWATER CONTROL PLAN**  
 CLAYTON CONTRA COSTA COUNTY CALIFORNIA  
 JOB NO. 18-16-00

FIGURE 2F. PRELIMINARY STORMWATER CONTROL PLAN








**Figure 3**

Moore Biological Consultants

Map Date: 07/28/2020  
Aerial Source: Google Earth (08/2017)

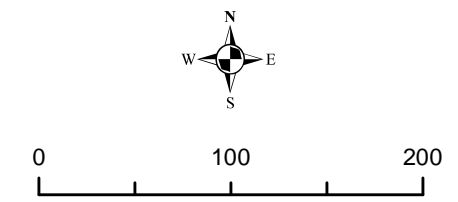
 Project Site (8.66 ac.)

 Stream (0.02 ac.)

 Seasonal Wetland (0.19 ac.)

 Annual Grassland (8.07 ac.)

 Urban (0.38 ac.)



**Field Verified Landcover Map**

**Diablo Meadows**

City of Clayton, Contra Costa County, CA



Annual grassland in the southwest part of the site, looking southwest; 04/03/20. The site was historically an orchard and there are remnant stumps from the orchard trees in the grasslands. This part of the site will remain in open space.



Annual grassland in the southeast part of the site, looking north; 04/03/20.

**FIGURE 4a**



Annual grassland in the northeast part of the site, looking west from Mitchell Canyon Road; 04/03/20. There are trees along the edges of the site and scattered trees in the grasslands.



Mitchell Canyon Road along the east edge of the site, looking north from near the southeast corner of the site; 04/03/20.

**FIGURE 4b**



Annual grassland and a valley oak in the northeast part of the site, looking west; 04/03/20. The relatively large trees in the site could be used by a variety of birds for nesting. No active raptor nests were observed during the April 2020 surveys.



One of several ground squirrel burrows in the site; 04/03/20. The burrows were inspected for evidence of burrowing owl occupancy and none was observed.

**FIGURE 4c**



Seasonal wetland in the west-central part of the site, looking northwest; 04/03/20. The approximate edges of the swale are noted with dashed lines. The seasonal wetland has directional flow and is best classified as a seasonal wetland swale.



Deep pocket in the swale a bit further north, looking north 04/03/20. This low area appears to hold water for several days or a few weeks after rain events. There is a patch of cocklebur in this low area.

**FIGURE 4d**



North end of the seasonal wetland, looking north at the fence along the edge of the site; 04/03/20. There is an incised channel in the north 20+/- feet of the wetland that is about 2 feet wide.



Ephemeral creek along the west edge of the site, looking south; 04/03/20. The creek is only 1 to 2 feet wide, yet is mapped as a "blue-line" stream on the USGS topographic map. The seasonal wetland swale is tributary to the creek north of the site.

**FIGURE 4e**



**Figure 5a**

Moore Biological Consultants

Project Site (8.66 ac.)

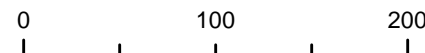
Stream (0.02 ac.)

Seasonal Wetland (0.19 ac.)

Urban (0.38 ac.)

Annual Grassland (8.07 ac.); assumed habitat for San Joaquin kit fox and western burrowing owl

Tree; potential nest site for white-tailed kite and Golden eagle

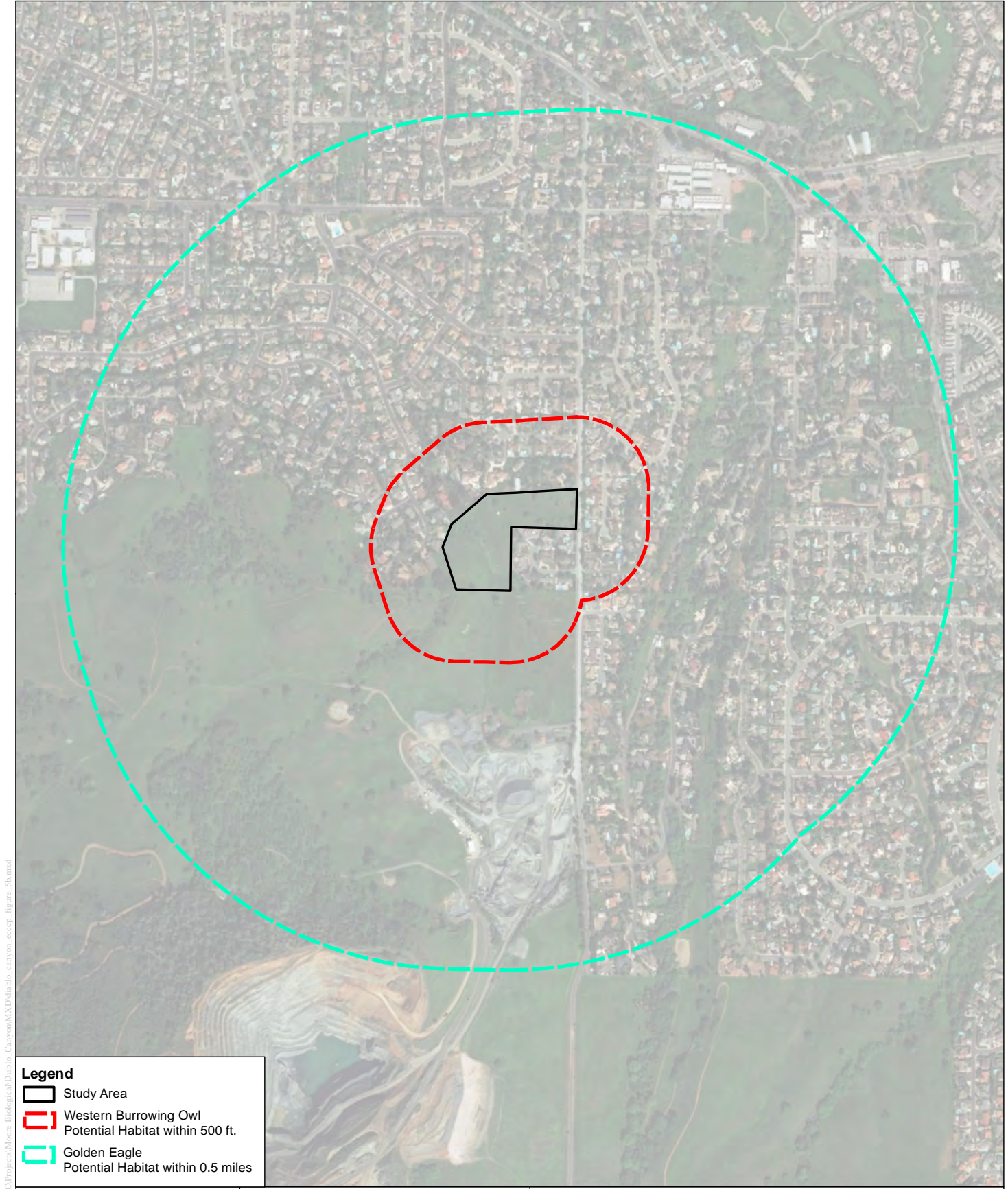


Map Date: 07/28/2020  
Aerial Source: Google Earth (08/2017)

**Planning Survey Species Habitat Map**




**Diablo Meadows**

City of Clayton, Contra Costa County, CA



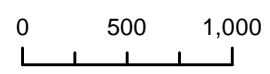
C:\Users\owner\Documents\FEC\_IN\Projects\Moore\_Biological\Diablo\_Canyon\MXD\Diablo\_Canyon\_sec01\_figures\_5b.mxd

**Legend**

-  Study Area
-  Western Burrowing Owl Potential Habitat within 500 ft.
-  Golden Eagle Potential Habitat within 0.5 miles

**Figure 5b**

Moore Biological  
Consultants



Map Date: 07/28/2020  
Aerial Photo: DigitalGlobe (2018)

**Regional Species Habitat Map**

**Diablo Meadows**

City of Clayton, Contra Costa County, CA



**ATTACHMENT C: PROJECT COMPLIANCE TO HCP CONDITIONS**

# Diablo Meadows

## Project Compliance to HCP Conditions

### July 2020

#### HCP/NCCP Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Covered Migratory Birds:

The potential for special-status plants to occur within the site is considered extremely remote, as described in Section III (10).

Species-specific pre-construction surveys, and if needed, monitoring and avoidance requirements for burrowing owl, San Joaquin kit fox, and golden eagle will be conducted as described in Section IV (2). There is no suitable habitat in the site for ringtail (*Bassariscus astutus*), a “fully protected species,” per California Fish and Game Code Section 4700. Similarly, there is no suitable nesting habitat in the site for peregrine falcon (*Falco peregrinus*), a “fully protected species,” per California Fish and Game Code Section 3511.

White-tailed kite (*Elanus caeruleus*), another “fully protected species,” per California Fish and Game Code Section 3511 could potentially nest in trees in and near the site. Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15-August 31), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether white-tailed kite is nesting in trees in or visible from the site. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.

On-site grasslands and shrubs could be used by other species of nesting birds protected by the Migratory Bird Treaty Act. If possible, vegetation removal will occur outside of the general bird nesting season (February 1 through August 31). Alternately, a qualified biologist will conduct a preconstruction survey no more than 2 weeks prior to vegetation removal. In the event active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.

#### HCP/NCCP Conservation Measure 2.12. Wetland, Pond, and Stream Avoidance and Minimization:

Potentially jurisdictional Waters of the U.S. and wetlands in the site are being fully avoided. The two ephemeral streams on the site will not be impacted by the project. A 25-foot stream setback will be implemented along both ephemeral streams. The seasonal wetland swale will also not be impacted by the project. A 25-foot buffer will be implemented along the seasonal wetland swale.

The following measures from pages 6-33 through 6-35 will be implemented avoid and minimize impacts of covered activities on wetlands:

- The project will comply with the stream setback requirements in Conservation

Measure 1.7.

- The project will comply with the guidelines in Conservation Measure 1.10 to minimize the effects of urban development on downstream hydrology, streams, and wetlands.
- All wetlands to be avoided by covered activities will be temporarily staked in the field by a qualified biologist.
- The project will establish a buffer zone between the ephemeral streams and development as described in Conservation Measure 1.7. A 25-foot buffer will be implemented along the seasonal wetland swale.
- Personnel conducting ground-disturbing activities within or adjacent to the buffer zone of the of the ephemeral streams or the seasonal wetland swale will be trained by a qualified biologist in these avoidance and minimization measures and the permit obligations of project proponents working under the ECCCHCP. Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas.
- Trash generated during project construction will be promptly and properly removed from the site.
- No construction or maintenance vehicles will be refueled within 200 feet of ephemeral streams or the seasonal wetland swale unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill.
- Appropriate erosion-control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into the ephemeral streams or the seasonal wetland swale. Filter fences and mesh will be of material that will not entrap reptiles and amphibians. Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
- Fiber rolls used for erosion control will be certified as free of noxious weed seed.
- Seed mixtures applied for erosion control will not contain invasive non native species, and will be composed of native species or sterile nonnative species.
- Herbicides will not be applied within the buffer area around ephemeral streams or the seasonal wetland swale unless needed to control serious invasive plants. In this case, herbicides that have been approved for use by EPA in or adjacent to aquatic habitats may be used as long as label instructions are followed and applications avoid or minimize impacts on covered species and their habitats. Appropriate herbicides may be applied to the ruderal grassland within the buffer area during the dry season to control nonnative invasive species such as yellow star-thistle. Herbicide drift shall be minimized by applying the herbicide as close to the target area as possible.

HCP/NCCP Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion:

The project has been designed to maintain hydrologic conditions and minimize erosion. Site drainage will be conveyed to a municipal storm drain system. Standard construction best management practices (BMPs) will be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs will include use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydromulch.

HCP/NCCP Conservation Measure 1.7. Establish Stream Setbacks:

A stream is defined in Chapter 3 of the ECCCHCP as “a long, narrow body of flowing water that occupies a channel with defined bed and bank and moves to lower elevations under the force of gravity”.

The ephemeral streams in the site will not be impacted by the project. A 25-foot stream setback will be implemented along the ephemeral streams. A 25-foot buffer will also be implemented along the seasonal wetland swale

Stream setbacks are designed to protect existing habitat quality, to protect water quality and hydrologic processes through buffering, and allow for at least minimal restoration (page 6-16). The stream setback measure is intended to achieve several purposes as listed on pages 6-16 and 6-17 of the ECCCHCP, along a variety of stream types. Six of the seven purposes have applicability to the project:

- Maintain or improve water quality by filtering sediments and pollutants from urban runoff before they reach the stream,
- Maintain and enhance the water quality of the stream to protect native fish populations, including populations of special-status species that occur in downstream creeks,
- Maintain a more viable wildlife corridor for some species (e.g., California red-legged frog, foothill yellow-legged frog) than would be present with a narrower buffer zone, and
- Maximize the natural flood protection value of the floodplain.

**ATTACHMENT D: FEE CALCULATOR**

# ECCC HCP/NCCP 2020 Fee Calculator Worksheet

## Permanent Impacts

PROJECT APPLICANT: DeNova Homes, Inc.

PROJECT NAME: Diablo Meadows

APN(s): 121-090-016-1 and 121-090-011-2

JURISDICTION: Clayton

DATE: July 2020

<u>DEVELOPMENT FEE</u>	<u>ACREAGE PERMANENTLY IMPACTED (TABLE 1)<sup>1</sup></u>	<u>2020 FEE PER ACRE (SUBJECT TO CHANGE)<sup>2</sup></u>		
See appropriate ordinance or HCP/NCCP Figure 9-1 to determine Fee Zone	Fee Zone 1		x	\$17,139.99 = \$0.00
	Fee Zone 2	8.28	x	\$34,279.99 = \$283,838.32
	Fee Zone 3		x	\$8,570.72 = \$0.00
				<b>Development Fee Total = \$283,838.32</b>

<u>WETLAND MITIGATION FEE</u>	<u>ACREAGE PERMANENTLY IMPACTED (TABLE 1)<sup>1</sup></u>	<u>2020 FEE PER ACRE (SUBJECT TO CHANGE)<sup>2</sup></u>		
	Riparian woodland / scrub		x	\$84,239.66 = \$0.00
	Perennial Wetland		x	\$115,275.32 = \$0.00
	Seasonal Wetland		x	\$249,763.19 = \$0.00
	Alkali Wetland		x	\$236,462.19 = \$0.00
	Ponds		x	\$125,620.54 = \$0.00
	Aquatic (open water)		x	\$63,549.21 = \$0.00
	Slough / Channel		x	\$143,355.21 = \$0.00
		<u>LINEAR FEET PERMANENTLY IMPACTED (TABLE 1)</u>		<u>2020 FEE PER LINEAR FT (SUBJECT TO CHANGE)<sup>2</sup></u>
	<b>STREAMS</b>			
	Streams 25 feet wide or less		x	\$686.78 = \$0.00
	Streams greater than 25 feet wide		x	\$1,034.52 = \$0.00
				<b>Wetland Mitigation Fee Total = \$0.00</b>

<u>FEE REDUCTION<sup>3</sup></u>	Development Fee reduction for land in lieu of fee	=	
	Development Fee reduction (up to 33% ) for permanent assessments	=	
	Wetland Mitigation Fee reduction for wetland restoration/creation performed by applicant	=	
	<b>Reduction Total</b>	=	<b>\$0.00</b>

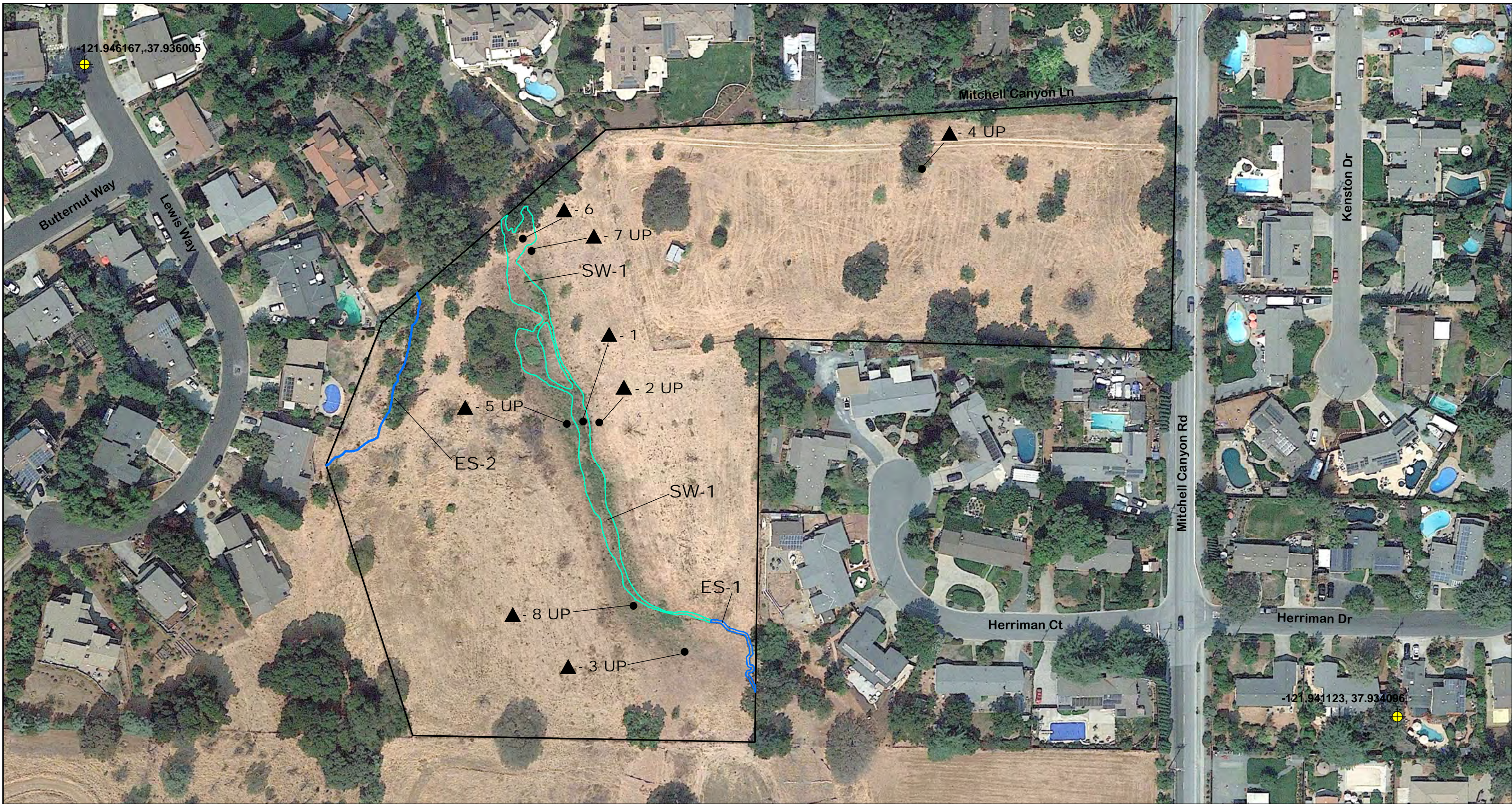
<u>FINAL FEE CALCULATION</u>	Development Fee Total	=	\$283,838.32
	Wetland Mitigation Fee Total	+	\$0.00
	<b>Fee Subtotal</b>	=	<b>\$283,838.32</b>
	<b>Contribution to Recovery</b>	+	
	<b>TOTAL AMOUNT TO BE PAID</b>	=	<b>\$283,838.32</b>

<sup>1</sup> City/County planning staff will consult the land cover map in the Final HCP/NCCP and will reduce the acreage subject to the Development Fee by the acreage of the subject property that was identified in the Final HCP/NCCP as urban, turf, landfill or aqueduct land cover.

<sup>2</sup> Development Fees are adjusted annually according to a formula that includes both a Home Price Index (HPI) and a Consumer Price Index (CPI). The Wetland Mitigation Fees are adjusted according to a CPI. The Conservancy conducted the 2013 periodic fee audit required by the HCP/NCCP. Action by the County and participating cities is pending, which could result in adjustments to some or all fees in 2020.

<sup>3</sup> Fee reductions must be reviewed and approved by the Conservancy.

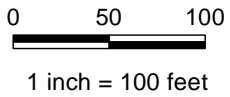
**ATTACHMENT E: WETLAND DELINEATION**







**Data Disclaimer:**  
 The delineation has been done in accordance with the 1987 Wetlands Delineation Manual, US Army Corps of Engineers and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers.

Aerial Source: DigitalGlobe (2019); Google Earth (06/2018)

Moore Biological Consultants



-  Study Area (8.66 acres)
-  Seasonal Wetland (SW-1) - 0.19 ac / 8,073 sf
-  Ephemeral Stream (ES-1) - 0.01 ac / 348 sf  
(ES-2) - 0.01 ac / 244 sf
-  - 1 3-Parameter Data Point

## Potential Waters of the U.S. and Wetlands

### Diablo Meadows

City of Clayton, Contra Costa County, CA

Map Date: 07/28/2020



**Appendix C**  
**Geotechnical Investigation**

February 28, 2020

**GEOTECHNICAL INVESTIGATION  
MITCHELL CANYON DEVELOPMENT  
CLAYTON, CALIFORNIA  
*SFB PROJECT NO. 155-90***

*Prepared For:*

DeNova Homes  
1500 Willow Pass Court  
Concord, CA 94520

*Prepared By:*

**Stevens, Ferrone & Bailey Engineering Company, Inc.**



---

Jonathan Bailey, P.E., G.E.  
*Civil/Geotechnical Engineer*



---

Kenneth C. Ferrone, P.E., G.E., C.E.G.  
*Civil/Geotechnical Engineer  
Certified Engineering Geologist*



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## **1.0 INTRODUCTION**

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This report presents the results of our geotechnical investigation for the proposed residential subdivision development to be located west of Mitchell Canyon Road (APN 121-090-011 & 121-090-016) in Clayton, California as shown on the Site Plan, Figure 1. The purpose of our investigation was to evaluate the geological and geotechnical conditions at the site and provide recommendations regarding the geotechnical engineering aspects of the project.

Based on the information indicated on the Site Plan, as well as information provided by DeNova Homes., it is our understanding that the project will consist of developing approximately 3 acres of land for a new 17-lot residential subdivision. A stormwater detention basin is also proposed. The project will be located to the east of an existing wetland and steep hillside area. Each new lot will include a single-family, detached home. Cut and fill grading is anticipated to develop flat building pad at each of the lots. Moderate grading will be needed to develop the site. Associated underground utilities and paved roadways will be constructed. The existing structures and facilities at the site will be demolished prior to new construction. Open space areas will be located to the west of the development area.

The conclusions and recommendations provided in this report are based upon the information presented above; Stevens, Ferrone & Bailey Engineering Company, Inc. (SFB) should be consulted if any changes to the project occur to assess if the changes affect the validity of this report.

## **2.0 SCOPE OF WORK**

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Our investigation of the site included the following scope of work:

- Reviewing published and unpublished geotechnical and geological literature relevant to the site;
- Reviewing a previous geotechnical investigation report by Abel R. Soares and Associates, dated July 13, 1976, including the results of two exploratory borings that extended to a maximum depth of about 6 feet;
- Performing geotechnical and geological reconnaissance of the site and surrounding area;
- Performing a supplemental subsurface exploration program, including drilling five exploratory borings to a maximum depth of about 21 feet and excavating five exploratory test pits to a maximum depth of about 6 feet;
- Performing laboratory testing of samples retrieved from the borings;
- Performing engineering analysis of the field and laboratory data; and
- Preparing this report.

The data obtained and the analyses performed were for the purpose of providing geotechnical design and construction criteria for site earthwork, underground utilities, drainage, building foundations, retaining walls, and pavements. Toxicity potential assessment of onsite materials or groundwater (including mold) and flooding evaluations were beyond our scope of work.

## **3.0 SITE INVESTIGATION**

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Reconnaissance of the site and surrounding area was performed on August 14, August 19, and August 26, 2019. Subsurface exploration was performed on August 19 and 26, 2019. Five exploratory borings were drilled using a truck-mounted drill rig equipped with 4-inch diameter, continuous flight, solid stem augers to a maximum depth of about 21 feet below existing grade. Five exploratory test pits were excavated using a CAT 430F2 backhoe to a maximum depth of about 6 feet below existing grade. Previously, two exploratory borings were drilled in 1976 by Abel R. Soares and Associates to a maximum depth of about 6 feet.

The approximate locations of all the borings and pits are shown on the Site Plan, Figure 1. Logs of our borings and pits and details regarding our field investigation are included in Appendix A. The results of our laboratory tests are discussed in Appendix B. Logs of the previous borings by others are included in Appendix C. It should be noted that changes in the surface and subsurface conditions can occur over time as a result of either natural processes or human activity and may affect the validity of the conclusions and recommendations in this report.

The exploratory pits were loosely backfilled and wheel-rolled upon completion. The pit backfill will require over-excavation and re-compaction at the time for the grading operations.

### **3.1 Site History and Surface Description**

At the time of our investigation and as shown on Figure 1, the site was bounded by Mitchell Canyon Road on the east, undeveloped land on the south, and existing residential developments on the other sides.

The entire site was L in shape and had a plan area of about 8.6 acres with maximum dimensions of about 870 feet by 690 feet. General site surface grades sloped gently downward towards the northwest, northeast, and north with slope inclinations varying from about 4:1 (horizontal to vertical) to 6:1 at higher elevations within the southwestern half of the site to about 10:1 to 23:1 at lower elevations with the northeastern half of the site. Ephemeral drainage channels extended through the southwestern half of the site from south to north.

The site was generally vacant except for a small shed and commercial lawnmower located near an existing oak tree at the northwestern corner of the site. The site surface vegetation consisted of a moderate to heavy growth of weeds and grasses and within the drainage channels heavy growths of trees, shrubs, and grasses. Small to large diameter trees were observed throughout the site.

Based on our review of historical topographic maps and aerial photographs of the site and vicinity, it is our understanding that the site was previously occupied by an orchard.

### **3.2 Subsurface Description**

The near-surface soil materials encountered in our borings generally consist of weak surface soils underlain by interbedded stiff to hard silty clays with sand, gravel, and rock fragments, and dense to very dense sands with clay, silt, gravel and rock fragments that extend to the maximum depth explored of about 21 feet. The near-surface soil materials encountered in our test pits generally consisted of soft to stiff clays and silts with sand and gravel and medium dense gravels with silt and sand. SFB Pits P-1 and P-3 encountered sandstone below surface soils. Bedrock encountered in the test pits was generally deeply to moderately weathered and friable to moderately strong. The two previous borings encountered similar conditions to the maximum depth explored of about 6 feet.

According to the results of laboratory testing, most of the near-surface more clayey soils have a low to medium plasticity and low to moderate expansion potential. Pit P-2, however, encountered a near-surface clay layer having high plasticity and high expansion potential. The soft to firm soils that mantle the site are weak and highly compressible; these soils typically extend to depths of about 2 feet except in the area of Pit P-3 (the northeast facing hillside in the southwest corner of the site) where weak and unstable soils extended to a depth of about 4 feet.

We anticipate soft, weak, and highly compressible soils with high water contents exist in the area of the eastern drainage channel. It has been our experience that these softer soils typically extend to depths of about 3 to 4 feet.

Detailed descriptions of the materials encountered in our exploratory borings, test pits, and borings by others are presented on the logs in Appendices A and C. Our attached boring and test pit logs and related information depict location-specific subsurface conditions encountered during our field investigation. The approximate locations of our borings and pits were determined using pacing or landmark references, and should be considered accurate only to the degree implied by the method used.

### **3.3 Groundwater**

Groundwater was encountered in Boring SFB-3 (near the drainage channel) at a depth of about 10 feet at the end of drilling. No groundwater was encountered in the other borings or pits. All our borings were backfilled with lean cement grout in accordance with Contra Costa County requirements prior to leave the site. It should be noted that the borings might not have been left open for a sufficient period of time to establish equilibrium groundwater conditions. In addition,



fluctuations in the groundwater level could occur due to change in seasons, variations in rainfall, and other factors.

### **3.4 Hydrologic Soil Group**

The surface soils of the site have been mapped as Gilroy clay loam (15 to 30 percent slopes, MLRA 15) in the southwest portion of the site, Gilroy clay loam (30 to 50 percent slopes, MLRA 15) in a small portion of the west corner, Los Osos clay loam (15 to 30 percent slopes, MLRA 15) in a small portion of the northwest corner, and Perkins gravelly loam (2 to 9 percent slopes) the rest of the site by USDA Web Soil Survey (WSS)<sup>1</sup>. The soils were assigned to Hydrologic Soil Group C and D by USDA Natural Resources Conservation Service (NRCS); the soils have been categorized as having very low to moderately high transmission rates (approximately 0.00 to 0.57 inches per hour).

Based on our site observations, the soils encountered in our borings, and the results of our laboratory testing, we recommend the near surface soils at the site be categorized as Group D soils. The Group D soils are defined as having a very slow infiltration rate when thoroughly wet (high runoff potential) and consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

### **3.5 Geology and Seismicity**

According to Helley and Graymer (1997)<sup>2</sup>, the site is underlain by Plio-Pleistocene undifferentiated continental gravel deposits that are generally composed of semi-consolidated to unconsolidated poorly sorted gravel, sand, silt and clay. According to Graymer, Jones, and Brabb (1994)<sup>3</sup>, the site (below surficial deposits) is underlain by Jurassic Diabase and Late Jurassic to early Cretaceous Knoxville Formation. The bedrock encountered by Pits P-1 and P-3 appeared to be sandstone of the Knoxville Formation. Our engineering geology map for the site is shown on Figure 1.

The project site is located in the San Francisco Bay Area that is considered one of the most seismically active regions in the United States. Significant earthquakes have occurred in the San Francisco Bay Area and are believed to be associated with crustal movements along a system of

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<sup>1</sup><http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> (accessed 08/21/19)

<sup>2</sup>Helley and Graymer, 1997, *Quaternary Geology of Contra Costa County, and Surrounding Parts of Alameda, Marin, Sonoma, Solano, Sacramento, and San Joaquin Counties, California: A Digital Database*, USGS Open-file Report 97-98.

<sup>3</sup>Graymer, Jones, and Brabb, 1994, *Preliminary Geologic Map Emphasizing Bedrock Formations in Contra Costa County, California: A Digital Database*, USGS Open-file Report 94-622.

sub-parallel fault zones that generally trend in a northwesterly direction. According to the Alquist-Priolo Earthquake Fault Zones Map of the Clayton Quadrangle, the site is not located in an earthquake fault zone as designated by the State of California<sup>4</sup>.

Earthquake intensities will vary throughout the San Francisco Bay Area, depending upon numerous factors including the magnitude of earthquake, the distance of the site from the causative fault, and the type of materials underlying the site. The U.S. Geological Survey (2016)<sup>5</sup> has stated that there is a 72 percent chance of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2014 and 2043. Therefore, the site will probably be subjected to at least one moderate to severe earthquake that will cause strong ground shaking.

According to the U.S. Geological Survey 's Unified Hazard Tool and applying the Dynamic: Conterminous U.S. 2008 (v3.3.2) model (accessed 08/21/19), the resulting deaggregation calculations indicate that the site has a 10% probability of exceeding a peak ground acceleration of about 0.57g in 50 years (design basis ground motion based on stiff soil to very dense soil and soft rock site condition; mean return time of 475 years). The actual ground surface acceleration might vary depending upon the local seismic characteristics of the underlying bedrock and the overlying unconsolidated soils.

### 3.6 Liquefaction

Soil liquefaction is a phenomenon primarily associated with saturated, cohesionless, soil layers located close to the ground surface. These soils lose strength during cyclic loading, such as imposed by earthquakes. During the loss of strength, the soil acquires mobility sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. According to ABAG and the U.S. Geological Survey<sup>6,7</sup>, the site is located in an area that has been characterized as having very low to low liquefaction susceptibility. As of the date of this report, the liquefaction potential of the site has not been evaluated by the State of California<sup>8</sup>.

Based on our review of available literature and the results of field explorations at the site, it is our opinion that the potential for ground surface damage at the site resulting from liquefaction is low.

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<sup>4</sup>State of California, *Special Studies Zones, Clayton Quadrangle*, Revised Official Map, Effective: July 1, 1993.

<sup>5</sup>Aagaard, Blair, Boatwright, Garcia, Harris, Michael, Schwartz, and DiLeo, *Earthquake Outlook for the San Francisco Bay Region 2014–2043*, USGS Fact Sheet 2016–3020, Revised August 2016 (ver. 1.1).

<sup>6</sup>Witter, Knudsen, Sowers, Wentworth, Koehler, and Randolph, 2006, *Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California*, USGS Open File Report 2006-1037.

<sup>7</sup>Knudsen, Sowers, Witter, Wentworth, and Helly, 2000, *Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County San Francisco Bay Region, California*, USGS Open File Report 00-444.

<sup>8</sup>Seismic Hazards Mapping Act, 1990.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

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It is our opinion that the site is suitable for the proposed project from a geotechnical engineering standpoint. The conclusions and recommendations presented in this report should be incorporated in the design and construction of the project to reduce soil or foundation related issues. The following are the primary geotechnical considerations for development of the site.

**WEAK SOIL RE-COMPACTION:** Weak and highly compressible soils mantle the development area of the site to depths of about 2 feet. In order to provide support of the planned improvements (such as fills, foundations, roadways, driveways, etc.), we recommend over-excavating the existing site grades about 1 foot, scarifying and re-compacting the bottom 12 inches in-place, and replacing the excavation with compacted fill materials. There would be no need to over-excavate soils within areas that do not support improvements, such as in planned open spaces beyond the limits of the lots. Where the over-excavation limits abut adjacent property, SFB should be consulted to determine the actual vertical and lateral extent of over-excavation so that adjacent property is not adversely impacted. Over-excavations should be performed so that no more than 5 feet of differential fill thickness will occur below the proposed building foundations. Removed soil can be used as new fill provided it is placed and compacted in accordance with the recommendations presented in this report.

The extent of the removal and re-compaction may vary across the site and should be determined in the field by SFB at the time of the earthwork operations.

The exploratory pits were loosely backfilled and wheel-rolled upon completion. The backfill will require over-excavation and re-compaction at the time for the grading operations.

**EXPANSION POTENTIAL:** Most of the clayey surficial soils were found to be moderately expansive and will be subjected to volume changes during seasonal moisture content fluctuations. To reduce the potential for post-construction distress to the proposed structure resulting from shrinkage and swelling of these materials, we recommend that the proposed structure be supported on a post-tensioned slab foundation system that is designed to reduce the impact of the expansive soils. It should be noted that special design considerations will also be required for exterior slabs.

The clayey soils encountered in Pit P-2 are highly expansive and can cause distress to overlying improvements when subjected to changes in moisture content. We recommend these highly expansive clays either (1) be completely over-excavated and mixed into planned fill materials or (2) be capped with at least 3 feet of engineered fill whose source is from elsewhere onsite. If alternative (1) is used, SFB should observe the over-excavation and mixing process so that the highly expansive clays are not placed in any one localized area.

**CUT/FILL TRANSITIONS AND DIFFERENTIAL FILL THICKNESS:** Proposed grading may result in cut/fill transitions across building pads and differential fill thickness greater than 5 feet below building foundations. In order to reduce the potential for excessive differential movement across the proposed home foundations, we recommend that foundations bear entirely on an engineered fill layer and that no more than 5 feet of differential fill thickness exist below foundations. Over-excavation and re-compaction below foundations will likely be necessary in some lots to satisfy this criterion.

**EROSION AND SLOPE MAINTENANCE:** Drainage and erosion control measures should be maintained during and after construction. Short-term and long-term erosion control are critical for the stability of any exposed cut and fill slopes, and may be necessary for the natural slopes in order to reduce sediment accumulation in the drainage systems. We recommend all exposed cut and fill slopes be seeded or planted with appropriately designed erosion resistant vegetation and fertilizer. The vegetation should be appropriately irrigated in order to establish and maintain growth. Over-watering should be avoided in order to reduce surficial instability and erosion. Vegetation should be deeply rooted to aid in the interlocking of the near-surface soils. Additional seeding and planting may be necessary in localized areas if the initial seeding or planting is unsuccessful. After seeding, fertilizing, and planting, staked erosion control blankets might be necessary to further stabilize the surficial soils.

Additional erosion control measures will need to be designed and implemented prior to the rainy season based upon the site's configuration. The measures could include straw wattles, silt fencing, hay bales, sediment collection basins, and filtration systems. Silt fencing should be designed for the site's soil type. Storm water discharge and release points from silt fencing should be designed to reduce erosion. In areas exposed to winter rains, we recommend an erosion control plan be prepared and implemented at least one month prior to the beginning of the rainy season. The erosion control measures will require inspection, modification, and re-mediation during the rainy season in order to comply with regulatory requirements.

**CORROSION POTENTIAL:** Four onsite soil sample was tested for pH (ASTM D4972), chlorides (ASTM D4327), sulfates (ASTM D4327), sulfides (ASTM D4658M), resistivity at 100% saturation (ASTM G57), and Redox potential (ASTM D1498) for use in evaluating the potential for corrosion on concrete and buried metal such as utilities and reinforcing steel. The results of these tests are included in Appendix B. We recommend these test results be forwarded to your underground contractors, pipeline designers, and foundation designers and contractors so that they can design and install corrosion protection measures. Please be aware that we are not corrosion protection experts; we recommend corrosion protection measures be designed and constructed so that all concrete and metal, including foundation post-tensioned cables and their end cut-offs, are protected against corrosion. We also recommend additional testing be performed

if the test results are deemed insufficient by the designers and installers of the corrosion protection. Landscaping soils typically contain fertilizers and other chemicals than can be highly corrosive to metals and concrete; landscaping soils commonly are in contact with foundations. Consideration should be given to testing the corrosion potential characteristics of proposed landscaping soils and other types of imported or modified soils in order to design and provide protection against corrosion for the foundation and pipelines.

**ADDITIONAL RECOMMENDATIONS:** Detailed drainage, earthwork, foundation, retaining wall, and pavement recommendations for use in design and construction of the project are presented below. We recommend SFB review the design and specifications to verify that the recommendations presented in this report have been properly interpreted and implemented in the design, plans, and specifications. We also recommend SFB be retained to provide consulting services and to perform construction observation and testing services during the construction phase of the project to observe and test the implementation of our recommendations, and to provide supplemental or revised recommendations in the event conditions different than those described in this report are encountered. We are not responsible for misinterpretation of our recommendations.

It is the responsibility of the contractors to provide safe working conditions at the site at all times. We recommend all OSHA regulations be followed, and excavation safety be ensured at all times. It is beyond our scope of work to provide excavation safety designs.

## **4.1 Earthwork**

### **4.1.1 Clearing and Site Preparation**

The site should be cleared of all obstructions including any existing structures and their entire foundation systems, existing utilities and pipelines and their associated backfill, designated trees and their associated entire root systems, and debris. Holes resulting from the removal of underground obstructions extending below the proposed finish grade should be cleared and backfilled with fill materials as specified in **Section 4.1.4, *Fill Material***, and compacted to the requirements in **Section 4.1.5, *Compaction***. Tree roots may extend to depths of about 3 to 4 feet. Wells and septic systems, if they exist, should be abandoned in accordance with Contra Costa County standards.

From a geotechnical standpoint, any existing trench backfill materials, clay or concrete pipes, pavements, and concrete that are removed can be used as new fill onsite provided debris is removed and it is broken up to meet the size requirement for fill material in **Section 4.1.4, *Fill Material***. We recommend fill materials composed of broken up concrete or asphalt concrete not be located

within 3 feet of the ground surface in yard areas. Consideration should be given to placing these materials below pavements, directly under building footprints, or in deeper excavations. We recommend backfilling operations for any excavations be performed under the observation and testing of SFB.

At least two weeks prior to grading, areas containing surface vegetation should be mowed and the cut grasses and weeds removed from the site or stockpiled for use in landscaping. After mowing, the site should be disced or stripped. Portions of the site containing heavy surface vegetation that is not removed by discing should be stripped to an appropriate depth to remove these materials. The amount of actual stripping should be determined in the field by SFB at the time of construction. Stripped materials should be removed from the site or stockpiled for later use in landscaping, if desired.

#### **4.1.2 Weak Soil Re-Compaction**

As described previously, the upper two feet of the surface soils are generally loose, weak, and potentially compressible. In order to reduce the potential for damaging differential settlement of overlying improvements (such as new fills, building foundations, exterior flatwork, and pavements), we recommend these weak soil materials be completely removed and re-compacted.

We estimate the process can consist of over-excavating the existing surface grade 1 foot, scarifying and re-compacting the bottom 12 inches in-place, and replacing the excavation with compacted fill materials. There would be no need to over-excavate soils within areas that do not support improvements, such as within planned open spaces.

Where the over-excavation limits abut adjacent property, SFB should be consulted to determine the actual vertical and lateral extent of over-excavation so that adjacent property is not adversely impacted. Over-excavations should be performed so that no more than 5 feet of differential fill thickness exists below the proposed building foundations. The extent of the removal and re-compaction may vary across the site and should be determined in the field by SFB at the time of the earthwork operations.

Removed fill and soil materials may be used as new fill onsite provided it satisfies the recommendations provided in **Section 4.1.4, *Fill Material***. Compaction should be performed in accordance with the recommendations in **Section 4.1.5, *Compaction***.

#### **4.1.3 Subgrade Preparation**

After the completion of clearing, site preparation, and weak soil re-compaction, soil exposed in areas to receive improvements (such as structural fill, building foundations, driveways, exterior flatwork, and pavements) should be scarified to a depth of about 12 inches, moisture conditioned

to approximately 2 to 3 percent over optimum water content, and compacted to the requirements for structural fill.

If building pads or pavement subgrade are allowed to remain exposed to sun, wind, or rain for an extended period of time, or are disturbed by borrowing animals or vehicles, the exposed subgrade or pavement subgrade may need to be reconditioned (moisture conditioned and/or scarified and recompacted) prior to foundation or pavement construction. SFB should be consulted on the need for subgrade reconditioning when the subgrade is left exposed for extended periods of time.

#### **4.1.4 Fill Material**

From a geotechnical and mechanical standpoint, onsite soils having an organic content of less than 3 percent by volume can be used as fill. Fill should not contain rocks or lumps larger than 6 inches in greatest dimension with not more than 15 percent larger than 2.5 inches. If required, imported fill should have a plasticity index of 15 or less and have a significant amount of cohesive fines.

In addition to the mechanical properties specifications, all imported fill material should have a resistivity (100% saturated) no less than the resistivity for the onsite soils, a pH of between approximately 6.0 and 8.5, a total water soluble chloride concentration less than 300 ppm, and a total water soluble sulfate concentration less than 500 ppm. We recommend import samples be submitted for corrosion and geotechnical testing at least two weeks prior to being brought onsite.

#### **4.1.5 Compaction**

Within the upper 5 feet of the finished ground surface, we recommend structural fill be compacted to at least 90 percent relative compaction, and structural fill below a depth of 5 feet be compacted to at least 95 percent relative compaction, as determined by ASTM D1557 (latest edition). We recommend the new fill be moisture conditioned approximately 2 to 3 percent over optimum water content. The upper 6 inches of subgrade soils beneath pavements should be compacted to at least 95 percent relative compaction. Fill material should be spread and compacted in lifts not exceeding approximately 8 to 12 inches in un-compacted thickness.

#### **4.1.6 Engineered Slopes**

##### ***4.1.6.1 General***

We recommend cut and non-reinforced fill slopes not exceed an inclination of 2:1 (horizontal to vertical). Steeper fill slopes are feasible provided they are mechanically reinforced with geogrid; if requested, SFB can provide detailed designs of slope reinforcing if needed. We recommend all cut and fill slopes be constructed with surface drainage collection and discharge facilities. Shallow slope movements such as surficial sloughing, toppling, and flows, however, could still occur as a

result of erosion and unanticipated water infiltration. To decrease the potential for shallow slope movement, the drainage and erosion control recommendations presented in this report should be implemented in the design and construction of the site. The implemented drainage and erosion control measures should be maintained during and after construction. Slope benches should be constructed in accordance with the latest edition of the California Building Code. Slope maintenance may include re-establishing drainage patterns, controlling water infiltration, and repairing shallow slope movements.

#### **4.1.6.2 Fill Slopes**

We recommend fill slopes be built using well-mixed, moisture conditioned, and well blended engineered fill to reduce the potential for slope expansion and creeping. We also recommend that fill slopes be over-built approximately 2 feet horizontally and then trimmed back to finished grades. Where fills are placed on slopes steeper than 10:1 (horizontal to vertical), the fills should be keyed at least 5 feet into competent native soils or at least 3 feet into competent bedrock. Keyways should be at least 10 feet wide and a subdrain should be placed at the bottom and to the rear of each keyway. The keyway should be sloped toward the back of the key at 2 percent or steeper. A subgrade bench and subdrain should be provided for approximately every 10 feet of vertical elevation gain, and the bench should extend at least one foot into competent soils or bedrock. Subdrain construction is described in **Section 4.1.7, *Subsurface Drainage***. The actual extent of the keying, benching, and subdrainage should be determined by SFB during earthwork operations. SFB should also be consulted during the development of grading plans to estimate locations of keyways and subdrains.

#### **4.1.7 Subsurface Drainage**

In order to reduce the potential for subsurface water created issues, we recommend subdrains be installed below engineered fill placed on slopes, at the toe of slopes, and where open space areas direct water toward improvements. During the earthwork operations, additional subdrains may be necessary in areas of encountered or anticipated seepage on the slopes. We recommend a subdrain be located below lined ditches or earthen swales that collect surface water from open space areas; the purpose of the subdrain is to intercept water that can flow under ditches and cause damage and distress. The actual location and extent of subdrains should be assessed by SFB during the development of the grading and improvement plans and determined in the field by SFB at the time of construction.

Where used, subdrains should consist of 4-inch diameter, rigid perforated pipe (perforations down) surrounded by free draining, uniformly graded, 1/2 to 3/4-inch crushed gravel wrapped in filter fabric such as Mirafi 140N or equivalent. The pipe should be underlain by about 1/2 to 1 inch of the gravel, and on the sides by at least 4 inches of gravel. The filter fabric should overlap approximately 12 inches or more at joints. Subdrains should be connected to a solid, rigid,



collector pipe with a minimum diameter of 4 inches. Subdrain pipes can consist of rigid ABS (SDR-35) or PVC A-2000 (or equal) for fills less than 20 feet in height. Collector pipes should be connected to appropriate discharge facilities such as storm drains, drainage inlets, or storm drain manholes. Subdrain clean-outs should be provided. The clean-out locations should be based upon the reach of the rotary cleaning systems and the restrictions of pipe bends. Caltrans Class 2 permeable material may be used in lieu of gravel and filter fabric.

Where used, subdrain trenches should be at least 12 inches wide and about 4 feet deep below adjacent ground surface. If a subdrain trench extends to the ground surface and is not covered with concrete lined ditch or concrete flatwork, we recommend the subdrain trench be covered with a 12-inch thick cap consisting of native soil compacted to at least 90 percent relative compaction.

#### **4.1.8 Utility Trench Backfill**

Pipeline trenches should be backfilled with fill placed in lifts of approximately 8 inches in uncompacted thickness. Thicker lifts can be used provided the method of compaction is approved by SFB and the required minimum degree of compaction is achieved. Backfill should be placed by mechanical means only. Jetting is not permitted.

Onsite trench backfill should be compacted to at least 90 percent relative compaction. Imported sand trench backfill should be compacted to at least 95 percent relative compaction and sufficient water is added during backfilling operations to prevent the soil from "bulking" during compaction. The upper 3 feet of trench backfill in foundation, slab, and pavement areas should be entirely compacted to at least 95 percent relative compaction. To reduce piping and settlement of overlying improvements, we recommend rock bedding and rock backfill (if used) be completely surrounded by a filter fabric such as Mirafi 140N (or equivalent); alternatively, filter fabric would not be necessary if Caltrans Class 2 permeable material is used in lieu of rock bedding and rock backfill.

Sand or gravel backfilled trench laterals that extend toward driveways, exterior slabs-on-grade, or under the building foundations, and are located below irrigated landscaped areas such as lawns or planting strips, should be plugged with onsite clays, low strength concrete, or sand/cement slurry. The plug for the trench lateral should be located below the edge of pavement or slabs, and under the perimeter of the foundation. The plug should be at least 24 inches thick, extend the entire width of the trench, and extend from the bottom of the trench to the top of the sand or gravel backfill.

#### **4.1.9 Exterior Flatwork**

We recommend that exterior slabs (including patios, sidewalks, and driveways) be placed directly on the properly compacted fills. We do not recommend using aggregate base, gravel, or crushed rock below these improvements. If imported granular materials are placed below these elements,

subsurface water can seep through the granular materials and cause the underlying soils to saturate or pipe. Prior to placing concrete, subgrade soils should be moisture conditioned to increase their moisture content to approximately 2 to 3 percent above laboratory optimum moisture (ASTM D-1557).

The more expansive clayey soils at the site could be subjected to volume changes during fluctuations in moisture content. As a result of these volume changes, some vertical movement of exterior slabs (such as driveways, sidewalks, patios, exterior flatwork, etc.) should be anticipated. This movement could result in damage to the exterior slabs and might require periodic maintenance or replacement. Adequate clearance should be provided between the exterior slabs and building elements that overhang these slabs, such as window sills or doors that open outward.

We recommend reinforcing exterior slabs with steel bars in lieu of wire mesh. To reduce potential crack formation, the installation of #4 bars spaced at approximately 24 inches on center in both directions should be installed. Score joints and expansion joints should be used to control cracking and allow for expansion and contraction of the concrete slabs. We recommend appropriate flexible, relatively impermeable fillers be used at all cold/expansion joints. The installation of dowels at all expansion and cold joints will reduce differential slab movements; the dowels should be at least 30 inches long and should be spaced at a maximum lateral spacing of 24 inches. Although exterior slabs that are adequately reinforced will still crack, trip hazards requiring replacement of the slabs will be reduced if the slabs are properly reinforced.

#### **4.1.10 Construction during Wet Weather Conditions**

If construction proceeds during or shortly after wet weather conditions, the moisture content of the onsite soils could be significantly above optimum. Consequently, subgrade preparation, placement and/or reworking of onsite soil or fills as structural fill might not be possible. Alternative wet weather construction recommendations can be provided by our representative in the field at the time of construction, if appropriate. All the drainage measures recommended in this report should be implemented and maintained during and after construction, especially during wet weather conditions.

#### **4.1.11 Surface Drainage, Irrigation, and Landscaping**

Ponding of surface water must not be allowed on pavements, adjacent to foundations, at the top or bottom of slopes, and at the top or adjacent to catchment and retaining walls. Ponding of water should also not be allowed on the ground surface adjacent to or near exterior slabs, including driveways, walkways, and patios. Surface water should not be allowed to flow over the top of slopes, down slope faces, or over catchment and retaining walls.

We recommend positive surface gradients of at least 2 percent be provided adjacent to foundations to direct surface water away from the foundations and toward suitable discharge facilities. Roof downspouts and landscaping drainage inlets should be connected to solid pipes that discharge the collected water into appropriate water collection facilities. We recommend the surface drainage be designed in accordance with the latest edition of the California Building Code.

In order to reduce differential foundation movements, landscaping (where used) should be placed uniformly adjacent to the foundation and exterior slabs. We recommend trees be no closer to the structure or exterior slabs than half the mature height of the tree; in no case should tree roots be allowed to extend near or below the foundations or exterior slabs.

Drainage inlets should be provided within enclosed planter areas and the collected water should be discharged onto pavement, into drainage swales, or into storm water collection systems. In order to reduce the potential for heaving, consideration should be given to lining planting areas and collecting the accumulated surface water in subdrain pipes that discharge to appropriate collection facilities. The drainage should be designed and constructed so that the moisture content of the soils surrounding the foundations do not become elevated and no ponding of water occurs. The inlets should be kept free of debris and be lower in elevation than the adjacent ground surface.

We recommend regular maintenance of the drainage systems be performed, including maintenance prior to rainstorms. The inspection should include checking drainage patterns to make sure they are performing properly, making sure drainage systems and inlets are functional and not clogged, and checking that erosion control measures are adequate for anticipated storm events. Immediate repairs should be performed if any of these measures appears to be inadequate.

Irrigation should be performed in a uniform, systematic manner as equally as possible on all sides of the foundations and exterior slabs to maintain moist soil conditions. Over-watering must be avoided. To reduce moisture changes in the natural soils and fills in landscaped areas, we recommend that drought resistant plants and low flow watering systems be used. All irrigation systems should be regularly inspected for leakage.

#### **4.1.12 Storm Water Runoff Structures**

To satisfy local and state permit requirements, most new development projects must control pollutant sources and reduce, detain, retain, and/or treat specified amounts of storm water runoff. The intent of these types of improvements is to conserve and incorporate on-site natural features, together with constructed hydrologic controls, to more closely mimic pre-development hydrology and watershed processes.

We recommend storm water collection improvements that are designed to detain, retain, and/or treat water such as bio-swales, porous pavement structures, and water detention basins, be lined with a relatively impermeable membrane in order to reduce water seepage and the potential for damage and distress to other infrastructure improvements (such as pavements, foundations, and walkways) which can occur as a result of volumetric soil/fill changes (heaving and shrinking of the surrounding soil/fill). We recommend a relatively impermeable membrane such as STEGO Wrap 15-mil or equivalent be installed below and along the sides of these facilities that direct the collected water into subdrain pipes. The membrane should be lapped and sealed in accordance with the manufacture's specifications, including taping joints where pipes penetrate the membrane. A subdrain pipe should be used at the base of the infiltration materials to collect accumulated water and transmit the water to an appropriate facility.

Soil filter materials within basins and swales will consolidate over time causing long-term ground surface settlement. Additional filling within the basins and swales over time will be needed to maintain design surface elevations. The soil filter materials, infiltration testing and procedures, and associated compaction requirements should be specified by the Civil Engineer and shown in detail on the grading and improvement plans.

Sidewalls of earthen swales and basins steeper than 3:1 (horizontal to vertical) will experience downward and lateral movements that can cause significant ground surface movements, including movement of adjacent improvements such as foundations, utilities, pavements, driveways, walkways, and curbs and gutters. The magnitude and rate of movement depends upon the swale and basin backfill material type and compaction. To reduce the potential for damaging movements, we recommend 3:1 sidewall slopes be used for earthen swales and basins, sidewalks be setback at least 3 feet from the top of the slope, creep sensitive improvements (such as roadway curbs) be setback at least 5 feet from the top of the slopes, or the slopes/sidewalls be appropriately restrained using an engineered retaining system, such as deepened curbs and foundations that are designed to resist lateral earth pressures and act as a retaining wall.

SFB should be consulted regarding the use, locations, and design of storm water detention and filtration facilities. We also recommend SFB observe and document the installation of liners, subdrain pipes, and soil filter materials during construction for conformance to the recommendations in this report and the development's plans and specifications.

#### **4.1.13 Future Maintenance**

In order to reduce water related issues, we recommend regular maintenance of the site and each lot be performed, including maintenance prior to rainstorms. Maintenance should include the re-compaction of loosened soils, collapsing and infilling holes with compacted soils or low strength sand/cement grout, removal and control of digging animals, modifying storm water drainage

patterns to allow for sheet flow into drainage inlets or ditches rather than concentrated flow or ponding, removal of debris within drainage ditches and inlets, and immediately repairing any erosion or soil flow. The inspection should include checking drainage patterns, making sure drainage systems are functional and not clogged, and erosion control measures are adequate for anticipated storm events. Immediate repair should be performed if any of these measures appear to be inadequate. Temporary and permanent erosion and sediment control measures should be installed over any exposed soils immediately after repairs are made.

Differential movement of exterior slabs can occur over time as a result of numerous factors. We recommend homeowners, the HOA, and development owners perform inspections and maintenance of slabs, including infilling significant cracks, providing fillers at slab offsets, and replacing slabs if severely damaged.

#### **4.1.14 Additional Recommendations**

We recommend that drainage, irrigation, landscaping, and maintenance recommendations provided in this report be forwarded to your designers and contractors, and we recommend they be included in disclosure statements given to homeowners, development owners, and their maintenance associations.

## **4.2 Foundation Support**

### **4.2.1 Post-Tensioned Slabs**

The proposed residential buildings can be supported on a post-tensioned slab foundation that is designed for the expansion potential of onsite soils. The slab foundation should bear entirely on properly prepared, compacted structural fill. Prior to the concrete pour, we recommend the moisture content of the pad subgrade materials be approximately 2 to 3 percent above laboratory optimum moisture. If the building pads are left exposed for an extended period of time prior to constructing foundations, we recommend SFB be contacted for recommendations to re-condition pads in order provide adequate building support.

The post-tensioned slab thickness should be determined by the Structural Engineer, however we recommend the post-tensioned slabs be at least 10 inches thick. An allowable bearing pressure of 1,500 pounds per square foot can be used for localized point and line loads. Deflection of the slab foundations should not exceed the values recommended in the most recent PTI Manual. Lateral loads, such as derived from earthquakes and wind, can be resisted by friction between the post-tensioned slab foundation bottom and the supporting subgrade. A friction coefficient of 0.25 is considered applicable.

At least 10 feet of cover should be provided between the outer face of slabs and un-retained slope faces, as measured laterally between slope faces and the slabs. Where less than 10 feet of cover exists, deepening of the edge of slabs may be necessary in order to achieve 10 feet of cover for buildings located near tops of slopes. Where slabs are located adjacent to utility trenches, the slab bearing surface should bear below an imaginary 1 horizontal to 1 vertical plane extending upward from the bottom edge of the adjacent utility trench. Alternatively, the slab reinforcing could be increased to span the area defined above assuming no soil support is provided.

A vapor retarder must be placed between subgrade soils and the bottom of the slabs-on-grade. We recommend the vapor retarder consist of a single layer of Stego Wrap Vapor Barrier 15 mil Class A or equivalent provided the equivalent satisfies the following criteria: a permeance as tested before and after mandatory conditioning of less than 0.01 Perms and strength of Class A as determined by ASTM E 1745 (latest edition), and a thickness of at least 15 mils. Installation of the vapor retarder should conform to the latest edition of ASTM E 1643 (latest edition) and the manufacturers requirements, including all joints should be lapped at least 6 inches and sealed with Stego Tape or equal in accordance with the manufacturer's specifications. Protrusions where pipes or conduit penetrate the membranes should be sealed with either one or a combination of Stego Tape, Stego Mastic, Stego Pipe Boots, or a product of equal quality as determined by the manufacturer's instructions and ASTM E 1643. Care must be taken to protect the membrane from tears and punctures during construction. We do not recommend placing sand or gravel over the membrane.

Concrete slabs retain moisture and often take many months to dry; construction water added during the concrete pour further increases the curing time. If the slabs are not allowed to completely cure prior to constructing the super-structure, the concrete slabs will expel water vapor and the vapor will be trapped under impermeable flooring. The concrete mix design for the slabs should have a maximum water/cement ratio of 0.45; the actual water/cement ratio may need to be reduced if the concentration of soluble sulfates or chlorides in the supporting subgrade is detrimental to the concrete. The results of sulfate and chloride testing of four onsite soil samples are included under separate cover. We recommend you consult with your concrete slab designers and concrete contractors regarding methods to reduce the potential for differential concrete curing.

An experienced Structural Engineer should design the post-tensioned slabs to resist the differential soil movement. The preliminary soil design parameters presented below were generated using the procedures presented in the Post-Tensioning Institute (PTI) design manual and PTI published specifications, and the PTI preferred computer program VOLFLO was employed to simulate the wetting and drying scenarios of the soils beneath the post-tensioned slabs.

The values provided below are based upon the post-tensioned slab foundations being entirely surrounded by uniform, properly drained, moderately irrigated landscaping; if differing conditions

exist that will cause differential soil moisture adjacent or below the slabs, or if portions of the foundations will be located adjacent to relatively dry or wet soils, then we should be consulted and modifications to the values below would need to be modified in writing. Please refer to **Section 4.1.11, Surface Drainage, Irrigation, and Landscaping**, for additional recommendations. We recommend that slab-subgrade friction values provided in the most recent PTI Manual be used in order to determine the friction that might be expected to exist during tendon stressing.

#### **SWELLING MODE**

	<u>Center Lift</u>	<u>Edge Lift</u>
Edge Moisture Variation Distance ( $e_m$ )	9.0 feet	5.0 feet
Differential Soil Movement ( $y_m$ )	0.5 inch	1.0 inch

We recommend SFB review the foundation drawings and specifications prior to submittal to verify that the recommendations provided in this report have been used and properly interpreted in the design of the slabs.

#### **4.2.2 Retaining Walls**

If segmental block walls with geogrid will be used at the site, SFB should be contacted to provide block wall and geogrid designs and specifications.

Where walls retain soil, they must be designed to resist both lateral earth pressures and any additional lateral loads caused by surcharging such as building and roadway loads. Where walls are used to retain soil, we recommend unrestrained walls (walls free to deflect and disconnected from other structures) be designed to resist an equivalent fluid pressure of 40 pounds per cubic foot. This assumes a level backfill. Restrained walls (walls restrained from deflection) should be designed to resist an equivalent fluid pressure of 40 pounds per cubic foot plus a uniform pressure of  $8H$  pounds per square foot, where  $H$  is the height of the wall in feet. Walls with inclined backfill should be designed for an additional equivalent fluid pressure of 1 pound per cubic foot for every 2 degrees of slope inclination. Walls subjected to surcharge loads should be designed for an additional uniform lateral pressure equal to one-third and one-half the anticipated surcharge load for unrestrained and restrained walls, respectively. These lateral pressures depend upon the moisture content of the retained soils to be constant over time; if the moisture content of the retained soils will fluctuate or increase compared to the moisture content at time of construction, then SFB should be consulted and provide written modifications to this design criteria.

For retaining walls that need to resist earthquake induced lateral loads from nearby foundations, walls that are to be designed to resist earthquake loads, and any retaining walls that are higher than

6 feet (as required by the 2016 CBC), we recommend the walls also be designed to resist a triangular pressure distribution equal to an equivalent fluid pressure of 30 pounds per cubic foot based on the ground acceleration from a design basis earthquake. This seismic induced earth pressure is in addition to the pressures noted above. Due to the transient nature of the seismic loading, a factor of safety of at least 1.0 can be used in the design of the walls when they resist seismic lateral loads. Some movement of the walls may occur during moderate to strong earthquake shaking and may result in distress as is typical for all structures subjected to earthquake shaking.

The recommended lateral pressures assume walls are fully-back drained to prevent the build-up of hydrostatic pressures. This can be accomplished by using ½ to ¾ inch crushed, uniformly graded gravel entirely wrapped in filter fabric such as Mirafi 140N or equal (an overlap of at least 12 inches should be provided at all fabric joints). The gravel and fabric should be at least 8 inches wide and extend from the base of the wall to within 12 inches of the finished grade at the top (Caltrans Class 2 permeable material (Section 68) may be used in lieu of gravel and filter fabric). A 4-inch diameter, perforated pipe should be installed at the base and centered within the gravel. The perforated pipe should be connected to a solid collector pipe that transmits the water directly to a storm drain, drainage inlet, or onto pavement. If weep holes are used in the wall, the perforated pipe within the gravel is not necessary provided the weep holes are kept free of animals and debris, are located no higher than approximately 6 inches from the lowest adjacent grade, and are able to function properly. As an alternative to using gravel, drainage panels (such as AWD SITEDRAIN Sheet 94 for walls or equal) may be used behind the walls in conjunction with perforated pipe (connected to solid collector pipe), weep holes, or strip drains (such as SITEDRAIN Strip 6000 or equal). If used, the drainage panels can be spaced on-center at approximately 2 times the panel width.

If heavy compaction equipment is used behind the walls, the walls should be appropriately designed to withstand loads exerted by the heavy equipment and/or temporarily braced. Fill placed behind walls should conform to the recommendations provided in **Section 4.1.4, Fill Material**, and **Section 4.1.5, Compaction**.

Retaining walls can be supported on drilled, cast-in-place, straight shaft friction piers that develop their load carrying capacity in the materials underlying the site. The piers should have a minimum diameter of 12 inches and a center-to-center spacing of at least three times the shaft diameter. We recommend that piers be at least 6 feet long. The pier reinforcing should be based on structural requirements but in no case should less than two #4 bars for the entire length of the pier be used.

The actual design depth of the piers should be determined using an allowable skin friction of 500 pounds per square foot (psf) for dead plus live loads, with a one-third increase for all loads including wind or seismic. Seventy percent of the skin friction value can be used to resist uplift.



Lateral load resistance can be developed in passive resistance for pier foundations. A passive resistance equal to an equivalent fluid weighing 350 pounds per cubic foot acting against twice the projected diameter of pier shafts can be used. The upper two feet of pier embedment should be neglected in the vertical and passive resistance design as measured from finished grade. The portion of the pier shaft located within 10 feet (as measured laterally) of the nearest slope face should also be ignored in the design.

We recommend the pier foundations be located outside of (or beyond) a 1:1 (horizontal to vertical) plane projected upward from the base of any wall or utility trench, or the portion of a pier located within this zone should be ignored in the design of the pier.

The bottoms of the pier excavations should be relatively dry and free of all loose cuttings or slough prior to placing reinforcing steel and concrete. Any accumulated water in pier excavations should be removed prior to placing concrete. We recommend that the excavation of all piers be performed under the direct observation of SFB to confirm that the pier foundations are founded in suitable materials and constructed in accordance with the recommendations presented herein. Preliminarily, we recommend concrete pours of pier excavations be performed within 24 hours of excavation and prior to any rainstorms. Where caving or high groundwater conditions exist, additional measures such as using casing, tremie methods, and pouring concrete immediately after excavating may be necessary. SFB should be consulted on the need for additional measures for pier construction as needed during construction.

#### **4.2.3 Seismic Design Criteria**

The following parameters were calculated using the U.S. Seismic Design Map program<sup>9</sup>, and were based on the site being located at approximate latitude 37.935°N and longitude 121.944°W. For seismic design using the 2019 California Building Code (CBC), we recommend the following seismic design parameters be used. These values are based on applying the ASCE 7-16 model and assuming the structures are categorized as Risk Category II.

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<sup>9</sup><https://seismicmaps.org/> (accessed 2/28/20)

Seismic Design Parameter	Design Value
Site Class	C
$S_s$	2.275
$S_1$	0.665
$S_{MS}$	2.731
$S_{M1}$	0.931
$S_{DS}$	1.820
$S_{D1}$	0.621
SDC	D
$F_a$	1.2
$F_v$	1.4
$PGA_M$	1.09

### 4.3 Pavements

Based on the results of laboratory testing of onsite materials, we recommend that an R-value of 5 be used in preliminary asphalt concrete pavement design. We recommend additional R-value tests be performed once the pavement subgrade is established to confirm the R-value used in the design. Pavement subgrade completely composed of sandy and gravelly fills will result in higher R-values and thinner pavement sections.

We developed the following alternative preliminary pavement sections using Topic 608 of the State of California Department of Transportation Highway Design Manual, the recommended R-value, and typical traffic indices for residential developments. The project's Civil Engineer or appropriate public agency should determine actual traffic indices. The pavement thicknesses shown below are SFB's recommended minimum values; governing agencies may require pavement thicknesses greater than those shown.

<b>PRELIMINARY PAVEMENT DESIGN ALTERNATIVES</b>			
<b>SUBGRADE R-VALUE = 5</b>			
Location	Pavement Components		Total Thickness (inches)
	Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)	
T.I. = 4.5 (auto & light truck parking)	3.0	9.0	12.0
T.I. = 5.0 (access ways/courts)	3.0	11.0	14.0

If the pavements are planned to be placed prior to or during construction, the traffic indices and pavement sections may not be adequate for support of what is typically more frequent and heavier construction traffic. If the pavement sections will be used for construction access by heavy trucks or construction equipment (especially fork lifts with support footings), SFB should be consulted to provide recommendations for alternative pavement sections capable of supporting the heavier use and heavier loads. If requested, SFB can provide recommendations for a phased placement of the asphalt concrete to reduce the potential for mechanical scars caused by construction traffic in the finished grade. Preliminary pavement sections should be revised, if necessary, when actual traffic indices are known and pavement subgrade elevations are determined.

Pavement baserock and asphalt concrete should be compacted to at least 95 percent relative compaction. The asphalt concrete compacted unit weight should be determined using Caltrans Test Method 308-A or ASTM Test Method D1188. Asphalt concrete should also satisfy the S-value requirements by Caltrans.

We recommend regular maintenance of the asphalt concrete be performed at approximately five-year intervals. Maintenance may include sand slurry sealing, crack filling, and chip seals as necessary. If regular maintenance is not performed, the asphalt concrete layer could experience premature degradation requiring more extensive repairs.

## **5.0 CONDITIONS AND LIMITATIONS**

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SFB is not responsible for the validity or accuracy of information, analyses, test results, or designs provided to SFB by others or prepared by others. The analysis, designs, opinions, and recommendations submitted in this report are based in part upon the data obtained from our field work and upon information provided by others. Site exploration and testing characterizes subsurface conditions only at the locations where the explorations or tests are performed; actual subsurface conditions between explorations or tests may be different than those described in this report. Variations of subsurface conditions from those analyzed or characterized in this report are not uncommon and may become evident during construction. In addition, changes in the condition of the site can occur over time as a result of either natural processes (such as earthquakes, flooding, or changes in ground water levels) or human activity (such as construction adjacent to the site, dumping of fill, or excavating). If changes to the site's surface or subsurface conditions occur since the performance of the field work described in this report, or if differing subsurface conditions are encountered, we should be contacted immediately to evaluate the differing conditions to assess if the opinions, conclusions, and recommendations provided in this report are still applicable or should be amended.

We recommend SFB be retained to provide geotechnical services during design, reviews, earthwork operations, paving operations, and foundation installation to confirm and observe compliance with the design concepts, specifications and recommendations presented in this report. Our presence will also allow us to modify design if unanticipated subsurface conditions are encountered or if changes to the scope of the project, as defined in this report, are made.

This report is a design document that has been prepared in accordance with generally accepted geological and geotechnical engineering practices for the exclusive use of DeNova Homes and their consultants for specific application to the proposed Mitchell Canyon Road residential subdivision development project in Clayton, California, and is intended to represent our design recommendations to DeNova Homes for specific application to the subdivision project. The conclusions and recommendations contained in this report are solely professional opinions. It is the responsibility of DeNova Homes to transmit the information and recommendations of this report to those designing and constructing the project. We will not be responsible for the misinterpretation of the information provided in this report. We recommend SFB be retained to review geological and geotechnical aspects of the construction calculations, specifications, and plans; we should also be retained to participate in prebid and preconstruction conferences to clarify the opinions, conclusions, and recommendations contained in this report.

It should be understood that advancements in the practice of geotechnical engineering and engineering geology, or discovery of differing surface or subsurface conditions, may affect the

validity of this report and are not uncommon. SFB strives to perform its services in a proper and professional manner with reasonable care and competence but we are not infallible. Geological engineering and geotechnical engineering are disciplines that are far less exact than other engineering disciplines; therefore we should be consulted if it is not completely understood what the limitations to using this report are.

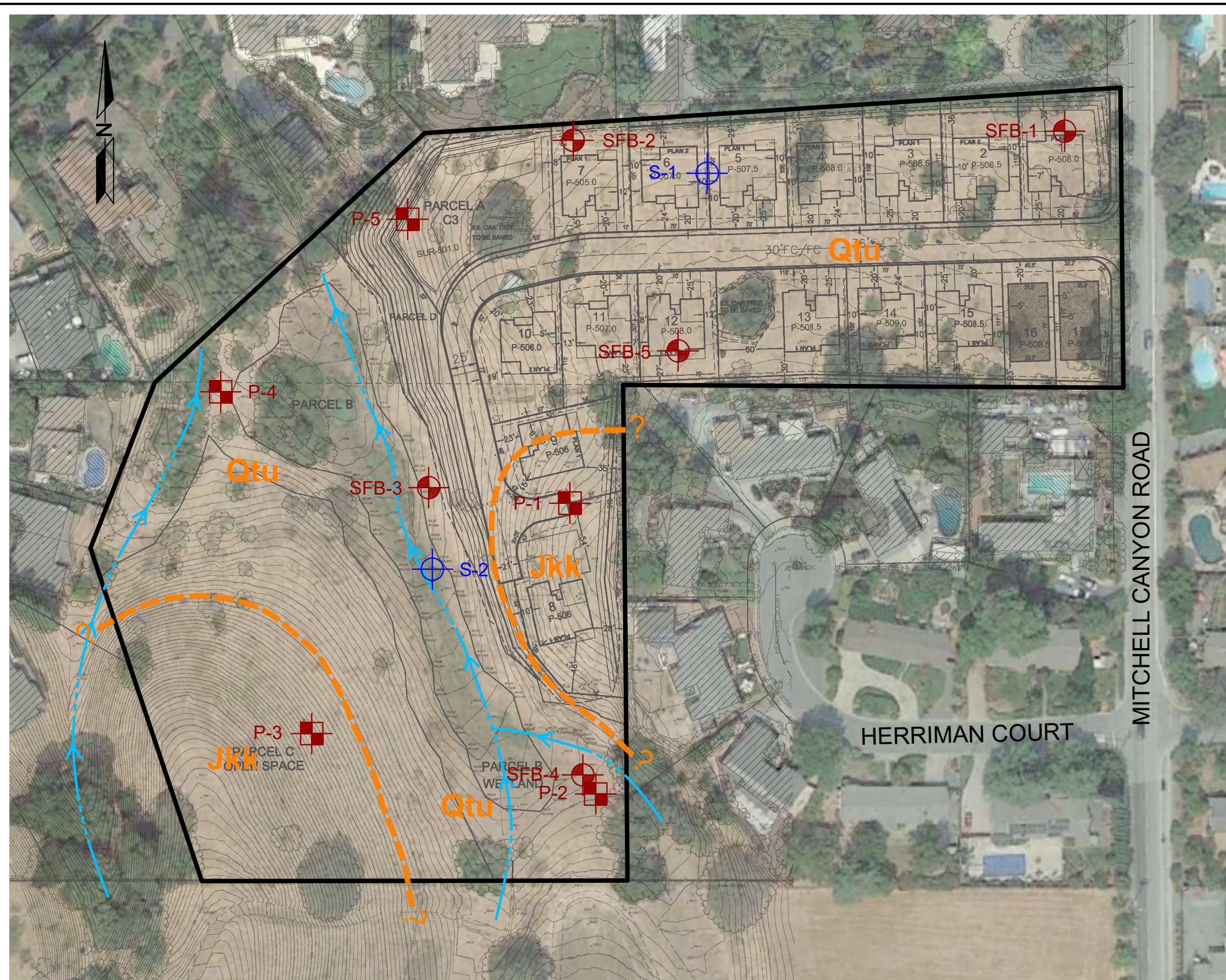
In the event that there are any changes in the nature, design or location of the project, as described in this report, or if any future additions are planned, the conclusions and recommendations contained in this report shall not be considered valid unless we are contacted in writing, the project changes are reviewed by us, and the conclusions and recommendations presented in this report are modified or verified in writing. The opinions, conclusions, and recommendations contained in this report are based upon the description of the project as presented in the introduction section of this report.

This report does not necessarily represent all of the information that has been communicated by us to DeNova Homes and their consultants during the course of this engagement and our rendering of professional services to DeNova Homes. Reliance on this report by parties other than those described above must be at their own risk unless we are first consulted as to the parties' intended use of this report and only after we obtain the written consent of DeNova Homes to divulge information that may have been communicated to DeNova Homes. We cannot accept consequences for use of segregated portions of this report.

Please refer to Appendix D for additional guidelines regarding use of this report.

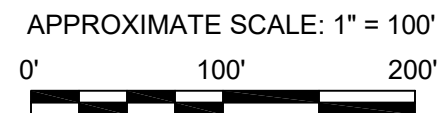
## FIGURES

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- KEY\***
- PROJECT LIMIT
  - P-5 SFB EXPLORATORY PIT (8/26/19)
  - SFB-5 SFB EXPLORATORY BORING (8/19/19)
  - S-2 PREVIOUS EXPLORATORY BORING (ABEL SOARES, 1976)
  - Qtu PLIO-PLEISTOCENE GRAVELLY SOILS
  - Jkk KNOXVILLE FORMATION SANDSTONE
  - ?- - - - ? GEOLOGIC CONTACT; QUERIED WHERE NOT MAPPED
  - Ephemeral Drainage Channel
- \*ALL LOCATIONS ARE APPROXIMATE

BASE: Overlaid project conceptual site plan prepared by Meridian Associates, Inc. and dated 1/20/20 on a Google Earth image dated 8/31/17.



DATE  
February 2020  
PROJECT NO.  
155-90

**Stevens**  
**SF**errone &  
**B**ailey  
Engineering Company, Inc

1600 Willow Pass Court  
Concord, CA 94520  
Tel 925.688.1001  
Fax 925.688.1005  
www.SFandB.com

SITE PLAN & ENGINEERING GEOLOGY MAP

MITCHELL CANYON ROAD  
Clayton, California

FIGURE

1

**APPENDIX A**  
Field Investigation

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**APPENDIX A**  
Field Investigation

Our field investigation for the proposed residential subdivision development to be located west of Mitchell Canyon Road in Clayton, California, consisted of surface reconnaissance and a subsurface exploration program. Geotechnical reconnaissance of the site and surrounding area was performed on August 14, 2019. Subsurface exploration was performed using a truck-mounted drill rig equipped with 4-inch diameter, continuous flight, solid stem augers and a Cat 430F2 backhoe. Five exploratory borings were drilled on August 19, 2019 to a maximum depth of about 21 feet below existing grade. Five exploratory test pits were excavated on August 26, 2019 to a maximum depth of about 6 feet below existing grade. Our representatives continuously logged the soils encountered in the borings and the pits in the field. The soils are described in general accordance with the Unified Soil Classification System (ASTM D2487). The logs of the borings and pits, as well as, a key for the classification of the soil (Figure A-1) and rocks mass characteristics (Figure A-2) are included as part of this appendix.

Representative samples were obtained from our exploratory borings and pits at selected depths appropriate to the investigation. Relatively undisturbed samples were obtained using a 3-inch O.D. split barrel sampler with liners, and disturbed samples were obtained using the 2-inch O.D. split spoon sampler. All samples were transmitted to our offices for evaluation and appropriate testing. Both sampler types are indicated in the "Sampler" column of the boring logs as designated in Figure A-1.

Resistance blow counts were obtained in our borings with the samplers by dropping a 140-pound safety hammer through a 30-inch free fall. The sampler was driven 18 inches and the number of blows were recorded for each 6 inches of penetration. The blows per foot recorded on the boring logs represent the accumulated number of converted blows that were required to drive the last 12 inches, or the number of inches indicated where hard resistance was encountered. The blow counts recorded on the boring logs have been converted to equivalent SPT field blow-counts, but have not been corrected for overburden, silt content, or other factors.

The attached boring and pit logs and related information show our interpretation of the subsurface conditions at the dates and locations indicated, and it is not warranted that they are representative of subsurface conditions at other locations and times.

## UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		grf	ltr	Description	Major Divisions	grf	ltr	Description
Coarse Grained Soils	Gravel	●	GW	Well-graded gravels or gravel sand mixtures, little or no fines	Soils	Sils And Clays LL < 50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			GP	Poorly-graded gravels or gravel sand mixture, little or no fines			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		○	GM	Silty gravels, gravel-sand-silt mixtures			OL	Organic silts and organic silt-clays of low plasticity
			GC	Clayey gravels, gravel-sand-clay mixtures			Sils And Clays LL > 50	MH
	Sand And Sandy Soils	SW	Well-graded sands or gravelly sands, little or no fines	CH		Inorganic clays of high plasticity, fat clays		
		SP	Poorly-graded sands or gravelly sands, little or no fines	OH		Organic clays of medium to high plasticity		
		SM	Silty sands, sand-silt mixtures	Highly Organic Soils		PT		Peat and other highly organic soils
		SC	Clayey sands, and-clay mixtures					

### GRAIN SIZES

U.S. STANDARD SERIES SIEVE				CLEAR SQUARE SIEVE OPENINGS			
200	40	10	4	3/4"	3"	12"	
Sils and Clays	Sand			Gravel		Cobbles	Boulders
	Fine	Medium	Coarse	Fine	Coarse		

### RELATIVE DENSITY

Sands and Gravels	Blows/Foot*
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Over 50

### CONSISTENCY

Sils and Clays	Blows/Foot*	Strength (tsf)**
Very Soft	0 - 2	0 - 1/4
Soft	2 - 4	1/4 - 1/2
Firm	4 - 8	1/2 - 1
Stiff	8 - 16	1 - 2
Very Stiff	16 - 32	2 - 4
Hard	Over 32	Over 4

\*Number of Blows for a 140-pound hammer falling 30 inches, driving a 2-inch O.D. (1-3/8" I.D.) split spoon sampler.  
 \*\*Unconfined compressive strength.

### SYMBOLS & NOTES

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li> Standard Penetration sampler (2" OD Split Barrel)</li> <li> Modified California sampler (3" OD Split Barrel)</li> <li> California Sampler (2.5" OD Split Barrel)</li> <li> Ground Water level initially encountered</li> <li> Ground Water level at end of drilling</li> </ul> | <ul style="list-style-type: none"> <li> Shelby Tube</li> <li> Pitcher Barrel</li> <li> HQ Core</li> </ul> |
|--|---|

### Increasing Visual Moisture Content

- ↑ Saturated  
Wet  
Moist  
Damp  
Dry

### Constituent Percentage

- |       |        |
|-------|--------|
| trace | <5%    |
| some  | 5-15%  |
| with  | 16-30% |
| -y    | 31-49% |

## KEY TO EXPLORATORY BORING LOGS

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	FIGURE NO.
<b>155-90</b>	<b>February 2020</b>	<b>A-1</b>

Stevens,  
Ferrone &  
Bailey

Engineering Company, Inc.

1600 Willow Pass Court  
Concord, CA 94520  
Tel: (925) 688-1001

# ROCK MASS CHARACTERISTICS

## WEATHERING

- FRESH** - Rock fresh, crystals bright, few joints may show slight staining. Rock rings under hammer blows if crystalline.
- VERY SLIGHT** - Rock generally fresh, joints stained, some joints may show thin clay coatings, crystals in broken face show bright. Rings under hammer blows if crystalline.
- SLIGHT** - Rock generally fresh, joints stained, and discoloration extends into rock up to 1 inch. Joints may contain clay. In granitoid rocks, some occasional feldspar crystals are dull and discolored. Crystalline rock rings under hammer blows.
- MODERATE** - Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some show clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.
- MODERATELY SEVERE** - All rock except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. Rock goes "clunk" when struck.
- SEVERE** - All rock except quartz discolored or stained. Rock "fabric" clear and evident, but reduced in strength to strong soil. In some granitoid rocks, all feldspars kaolinized to some extent. Some fragments of strong rock usually remain.
- VERY SEVERE** - All rock except quartz discolored or stained. Rock "fabric" discernible, but rock mass effectively reduced to "soil" with only fragments of strong rock remaining.
- COMPLETE** - Rock reduced to "soil." Rock "fabric" not discernible or discernible only in small scattered locations. Quartz may be present as dikes or stringers.

## STRENGTH

- VERY STRONG** - Resists breakage from hammer blows; but will yield dust and small chips.
- STRONG** - Withstands a few hammer blows; but will yield large fragments.
- MODERATELY STRONG** - Withstands a few firm hammer blows.
- WEAK** - Crumbles with light hammer blows.
- FRIABLE** - Can be broken down with hand and finger pressure.
- LOW** - Soil-like strength

## DISCONTINUITY SPACING

<u>JOINTS</u>	<u>BEDDING, CLEAVAGE, FOLIATION</u>		
CRUSHED	Very Laminated	Less than 1/2 inch	Less than 1.3 cm
INTENSELY	Laminated	1/2 to 1 inch	1.3 cm to 2.5 cm
VERY CLOSE	Very Thin	1 to 2 inches	2.5 cm to 5 cm
CLOSE	Thin	2 inches to 1 foot	5 cm to 30 cm
MODERATELY CLOSE	Medium	1 foot to 3 feet	30 cm to 1 m
WIDE	Thick	3 feet to 10 feet	1 m to 3 m
VERY WIDE	Very Thick	Greater than 10 feet	Greater than 3 m

## HARDNESS

- VERY HARD** - Cannot be scratched with a knife; metal powder left on sample.
- HARD** - Scratched with knife with difficulty; trace of metal powder left on samples; scratch faintly visible.
- MODERATELY HARD** - Readily scratched with knife, scratch leaves heavy trace of dust and is readily visible.
- LOW HARDNESS** - Gouged or grooved to 1/16 inch by firm pressure on knife; scratches with penny.
- SOFT** - Gouged or grooved readily with a knife; small thin pieces can be grooved by finger pressure.
- VERY SOFT** - Carves with knife; scratched by fingernail.

## ROUGHNESS OF DISCONTINUITY SURFACES

- SMOOTH** - Appears smooth and is essentially smooth to the touch. May be slickensided.
- SLIGHTLY ROUGH** - Asperities on the fracture are clearly visible.
- MEDIUM ROUGH** - Asperities are clearly visible and fracture surface feels abrasive.
- ROUGH** - Large angular asperities can be seen. Some ridge and high side angle steps are evident.
- VERY ROUGH** - Near vertical steps and ridges occur on the fracture surface.

ROCK CLASSIFICATION 155-90 PITS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



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## KEY TO ROCK CHARACTERISTICS

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	FIGURE NO.
<b>155-90</b>	<b>February 2020</b>	<b>A-2</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), reddish-brown, silty, with sand(fine- to medium-grained), trace gravel(fine, subangular to subrounded), with rootlets, dry.	very stiff		0						At 2 feet: Liquid Limit = 32% Plasticity Index = 14 Fine Gravel = 4% Coarse Sand = 4% Medium Sand = 6% Fine Sand = 12% Silt = 38% Clay = 36%
	hard				16	12	100	3.5	
Change color to mottled reddish-brown with black streaks, some sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), with sand clasts.	very stiff			5		23	18	109	
CLAY (CL), mottled brown, silty, with sand(fine- to medium-grained), with gravel(fine, subangular to subrounded), dry to damp.	hard			10		68/11"			
With rock fragments.									
SAND (SC), yellowish-brown, fine- to coarse-grained, with clay, some to with gravel(fine, subangular to subrounded), some silt, damp to moist. Some clay, damp.	dense		15		30/3"				
CLAY (CL), brown, silty, with sand(fine- to coarse-grained), damp.	hard		20		50/6"				
Bottom of Boring = 21 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.									

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20










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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-1</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), reddish-brown, silty, with sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), with sand clasts, damp.  Change color to mottled reddish-brown and light brown, dry to damp.	very stiff		0		16	19	104	6.3	
	hard			52					
			5		30/6"				
			10		30/4"				
SAND (SC), yellowish-brown, fine- to coarse-grained, some clay, trace silt, trace gravel(fine, subangular to subrounded), damp.	dense to very dense		15		50/6"				
Bottom of Boring = 16 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			20						

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-2</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER 10 feet	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), brown, silty, some sand(fine- to coarse-grained), dry to damp.	very stiff		0		16	26	93	6.0	
CLAY (CL), mottled reddish-brown and light brown, silty, with sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), damp.	very stiff		5		36	23	100	5.9	
CLAY (CL), yellowish-brown, silty, with sand(fine- to medium-grained), with carbonates, damp.	hard		10		53				
CLAY (CL), mottled olive and yellowish-brown, silty, some sand(fine- to coarse-grained), with rock fragments, damp to moist. Thin lense of rock at 11 feet.	hard		15		50/6"				
SAND (SC), brown, fine- to coarse-grained, with clay, some silt, with rock fragments, moist to wet.	dense to very dense		20						
Drilling refusal at 17 feet.									
Bottom of Boring = 17 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.									

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20






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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-3</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), yellowish-brown, silty, sandy(fine- to coarse-grained), dry.	hard		0						
GRAVEL (GM), drilling refusal.	dense				30/6" 50/2"				
Bottom of Boring = 2.5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20





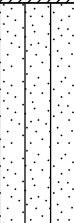



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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-4</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), yellowish-brown, silty, with sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), dry.  With rock fragments.  Change color to mottled reddish-brown and light brown, sandy(fine- to coarse-grained).	very stiff  hard		0		30/6" 50/5"	14	110	7.1	
SAND (SM), yellowish-brown, fine- to medium-grained, silty, with gravel(fine, subangular to subrounded), trace clay, with rock fragments, dry to damp.	dense to very dense		10		50/6"	9			
GRAVEL (GM), drilling refusal. Bottom of Boring = 12.5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			15		50/6"				
			20						

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



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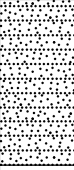
**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-5</b>



DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
SILT (ML), brown, sandy(fine-grained), some clay, dry.	soft		0						
SANDSTONE, mottled brown-black-gray, some clay coated surfaces, deeply to moderately weathered, low hardness, very closely fractured, chaotic fracture orientation, damp.	friable to moderately strong		5						
Bottom of Boring = 5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20





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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-1</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), brown, with silt, with sand(fine- to coarse-grained), trace gravel(fine to coarse, subangular to subrounded), damp.	stiff		0						Bag sample at 1-2 feet At 1-2 feet: Liquid Limit = 58% Plasticity Index = 39 Fine Gravel = 1% Coarse Sand = 3% Medium Sand = 6% Fine Sand = 10% Silt = 22% Clay = 58% Bag sample at 3 feet
GRAVEL (GM), mottled grayish-brown, fine to coarse, subangular to subrounded, sandy(fine- to coarse-grained), silty, damp.	medium dense								
Bottom of Boring = 5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20





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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
 Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-2</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
SILT (ML), brown, trace to some clay, trace sand(fine-grained), dry to damp.	soft		0						Bag sample at 1-3 feet
SANDSTONE, mottled dark brown, clay coated surfaces, deeply to moderately weathered, low hardness, very closely fractured, chaotic fracture orientation, damp. Bottom of Boring = 5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.	friable to moderately strong		5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20






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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-3</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
SILT (ML), brown, some clay, trace sand(fine-grained), trace roots, dry.	soft		0						
CLAY (CL)/SILT (ML), mottled brown, some sand(fine-to coarse-grained), some gravel(fine to coarse, subangular to subrounded), with tree roots to 3', damp.	stiff								
Change color to reddish-brown, increasing clay content with depth.	very stiff		5						
Bottom of Boring = 6 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20




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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-4</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
GRAVEL (GM), reddish-brown, fine to coarse, subangular to subrounded, with sand(fine- to coarse-grained), with silt, some clay, trace cobbles, damp.	medium dense		0						
Bottom of Boring = 6 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-5</b>

**APPENDIX B**  
Laboratory Investigation

---

**APPENDIX B**  
Laboratory Investigation

Our laboratory testing program for the proposed residential subdivision development to be located west of Mitchell Canyon Road in Clayton, California was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site.

The natural water content was determined on nine samples of the subsurface soils. The water contents are recorded on the boring logs at the appropriate sample depths.

Dry density determination was performed on six samples of the subsurface soils to evaluate their physical properties. The results of the tests are shown on the boring logs at the appropriate sample depths.

Atterberg Limit determinations were performed on two samples of the subsurface soils to determine the range of water content over which these materials exhibit plasticity. These values are used to classify the soil in accordance with the Unified Soil Classification System and to indicate the soil's compressibility and expansion potentials. The results of these tests are presented on the boring and pit log at the appropriate sample depth and are also attached to this appendix.

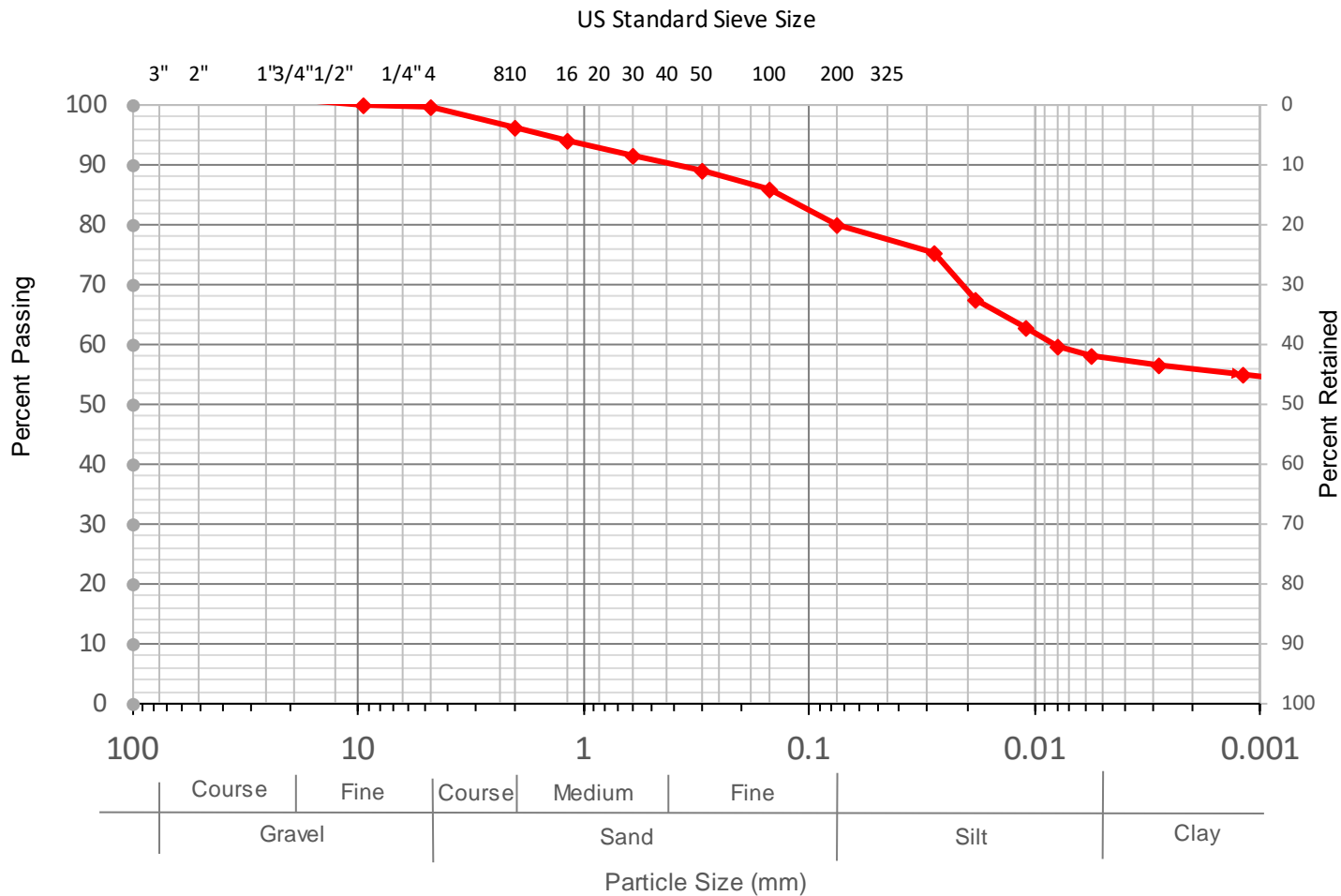
Gradation and hydrometer tests were performed on two samples of the subsurface soils. These tests were performed to assist in the classification of the soils and to determine their grain size distribution. The results of the tests are presented on the boring and pit log at the appropriate sample depth and are also attached to this appendix.

Unconfined compression tests were performed on five relatively undisturbed samples of the subsurface soils to evaluate the undrained shear strengths of these materials. Failure was taken as the peak normal stress. The results of the tests are presented on the boring logs at the appropriate sample depths and are also attached to this appendix.

Four onsite soil samples were tested for pH (ASTM D4972), chlorides (ASTM D4327), sulfates (ASTM D4327), sulfides (ASTM D4658M), resistivity at 100% saturation (ASTM G57), and Redox potential (ASTM D1498) for use in evaluating the potential for corrosion on concrete and buried metal such as utilities and reinforcing steel. The results of these tests are included in this appendix. We recommend these test results be forwarded to your underground contractors, pipeline designers, and foundation designers and contractors.

Hydrometer Analysis – ASTM D422

**Project Number:** 155-90      **Project Name:** Mitchell Canyon  
**Sample Number:** P-2      **Description:** Brown silty CLAY with sand (CH)  
**Depth :** 1'-2'      **Test Date:** 08-27-19      **Tested By:** R



Composite Sieve Data

Standard Sieve Size	Percent Passing
3"	
1.5"	
3/4"	
3/8"	100
#4	99.8
#10	96.3
#16	94.1
#30	91.4
#50	88.9
#100	85.8
#200	80.1

Particle Diameter (mm)	Percent Soil in Suspension
0.0280	75.4
0.0185	67.6
0.0110	62.8
0.0079	59.7
0.0056	58.1
0.0028	56.6
0.0012	55.0



UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-5

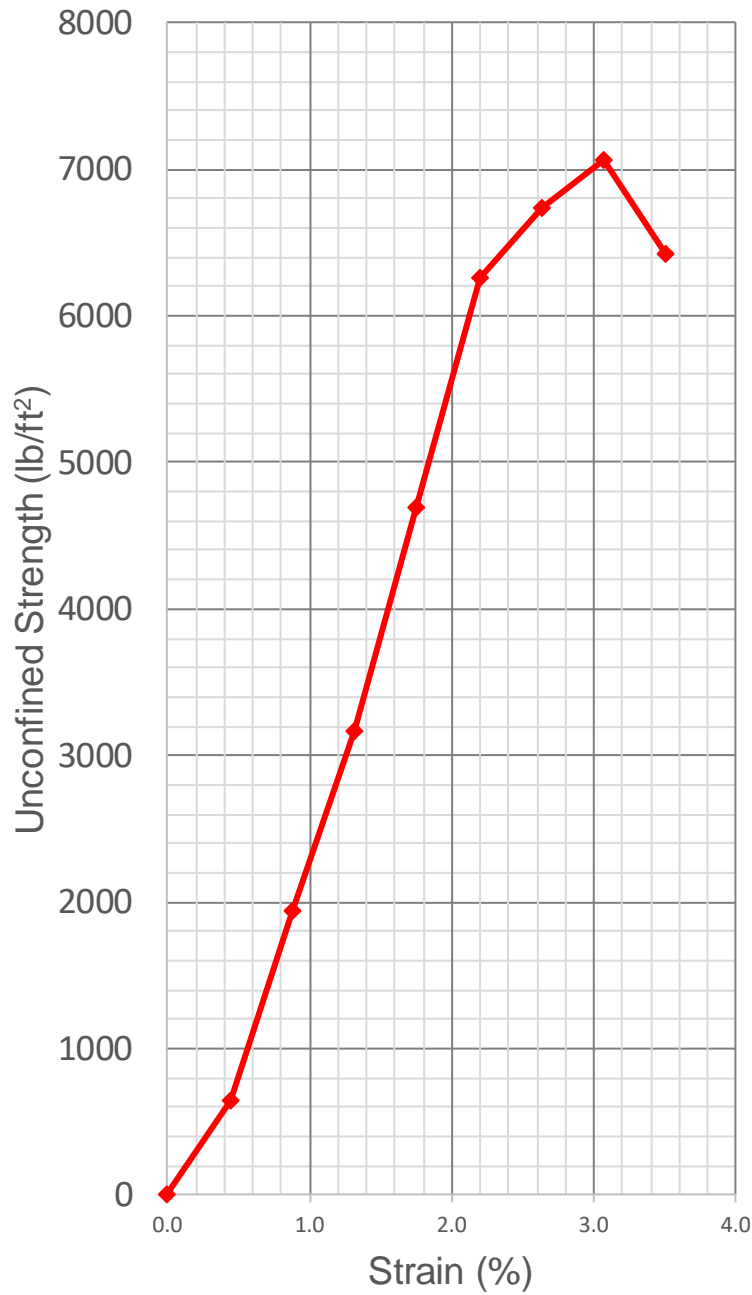
**Depth :** 1.5

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Red brown silty CLAY with sand and shale some gravel (CL)

**Tested By:** R



Soil Specimen Initial Measurements	
Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.7 in
Volume	0.01517 ft <sup>3</sup>
Water Content	14.1 %
Wet Density	125.0 pcf
Dry Density	109.6 pcf

Max Unconfined Compressive Strength	
Elapsed Time	3.5 min
Vertical Dial	0.175 in
Strain	3.1 %
Area	0.03296 ft <sup>2</sup>
Axial Load	232.8 lbs
Compressive Strength	7,064 psf

UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-3

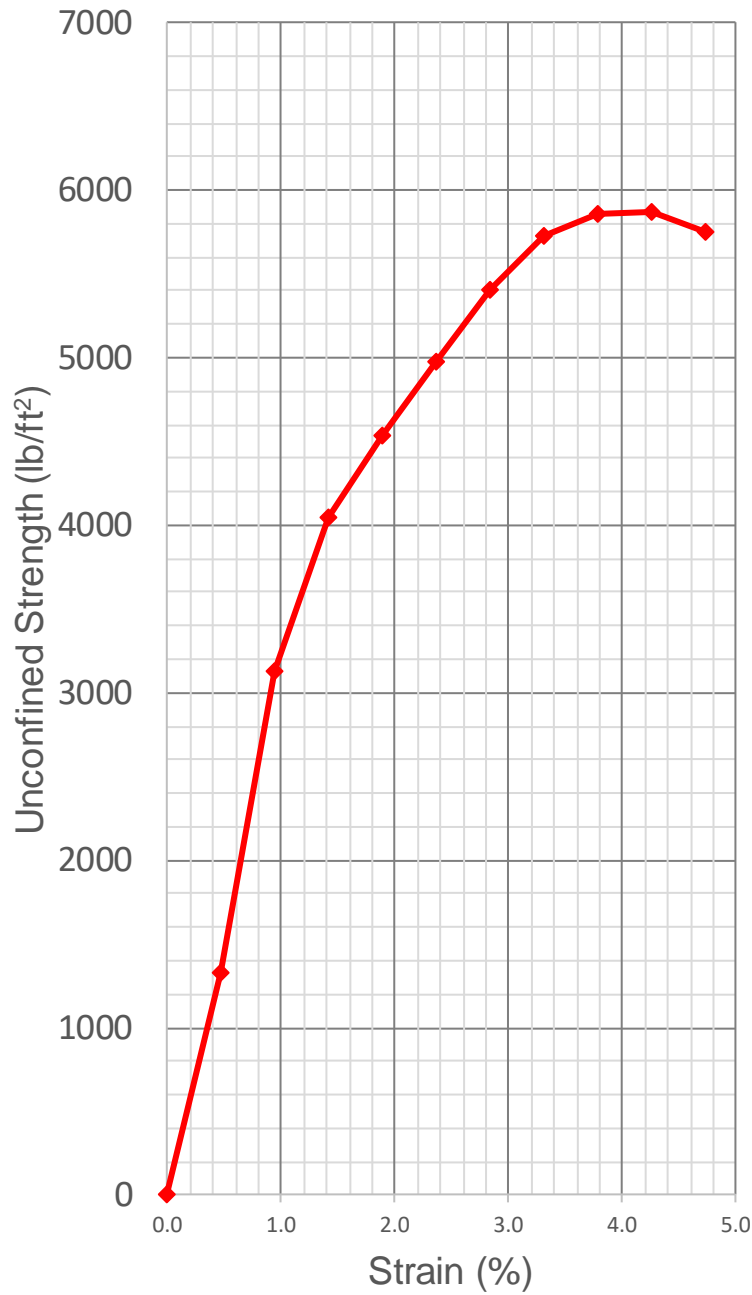
**Depth :** 6

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Brown silty CLAY with sand (CL)

**Tested By:** R



Soil Specimen Initial Measurements

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.29 in
Volume	0.01408 ft <sup>3</sup>
Water Content	22.8 %
Wet Density	123.2 pcf
Dry Density	100.3 pcf

Max Unconfined Compressive Strength

Elapsed Time	4.5 min
Vertical Dial	0.225 in
Strain	4.3 %
Area	0.03336 ft <sup>2</sup>
Axial Load	196.0 lbs
Compressive Strength	5,875 psf

**Project Number:** 155-90

**Boring #:** SFB-3

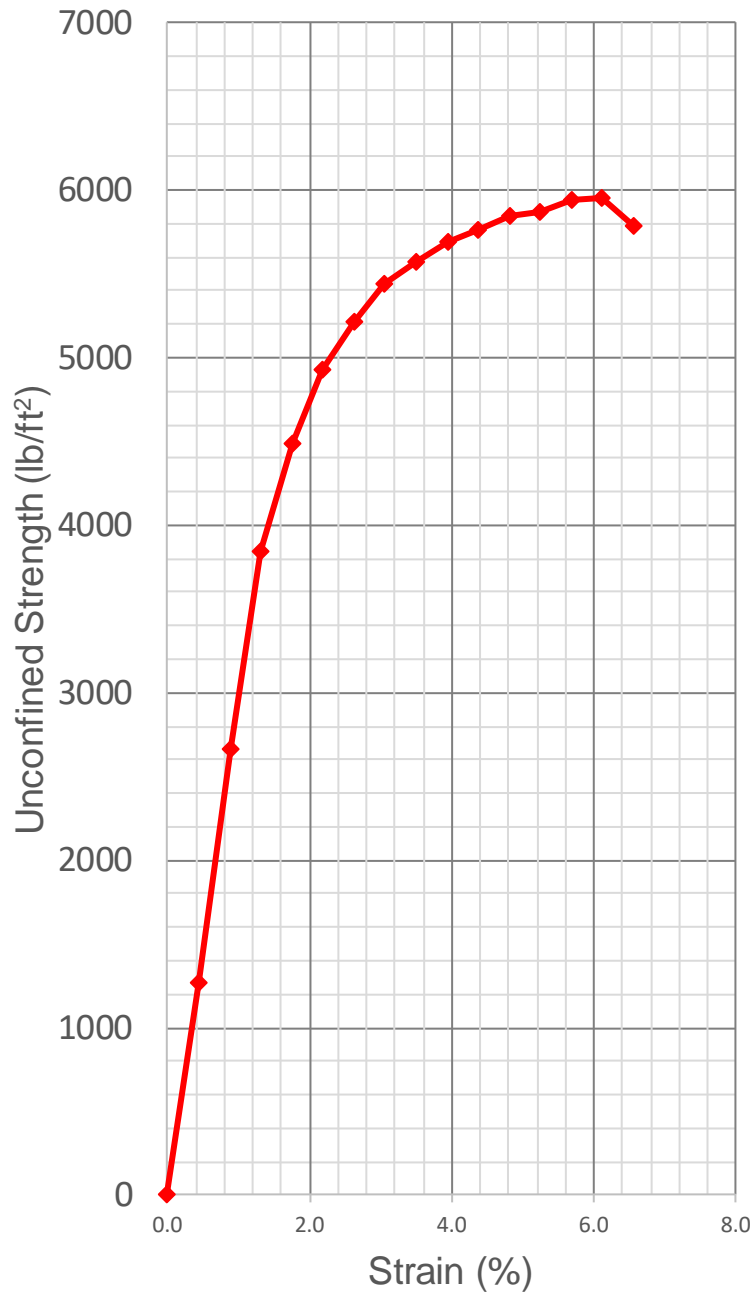
**Depth :** 2

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Dark brown silty CLAY some sand (CL)

**Tested By:** R



**Soil Specimen Initial Measurements**

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.72 in
Volume	0.01523 ft <sup>3</sup>
Water Content	26.1 %
Wet Density	116.6 pcf
Dry Density	92.5 pcf

**Max Unconfined Compressive Strength**

Elapsed Time	7 min
Vertical Dial	0.35 in
Strain	6.1 %
Area	0.03403 ft <sup>2</sup>
Axial Load	202.7 lbs
Compressive Strength	5,957 psf

UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-2

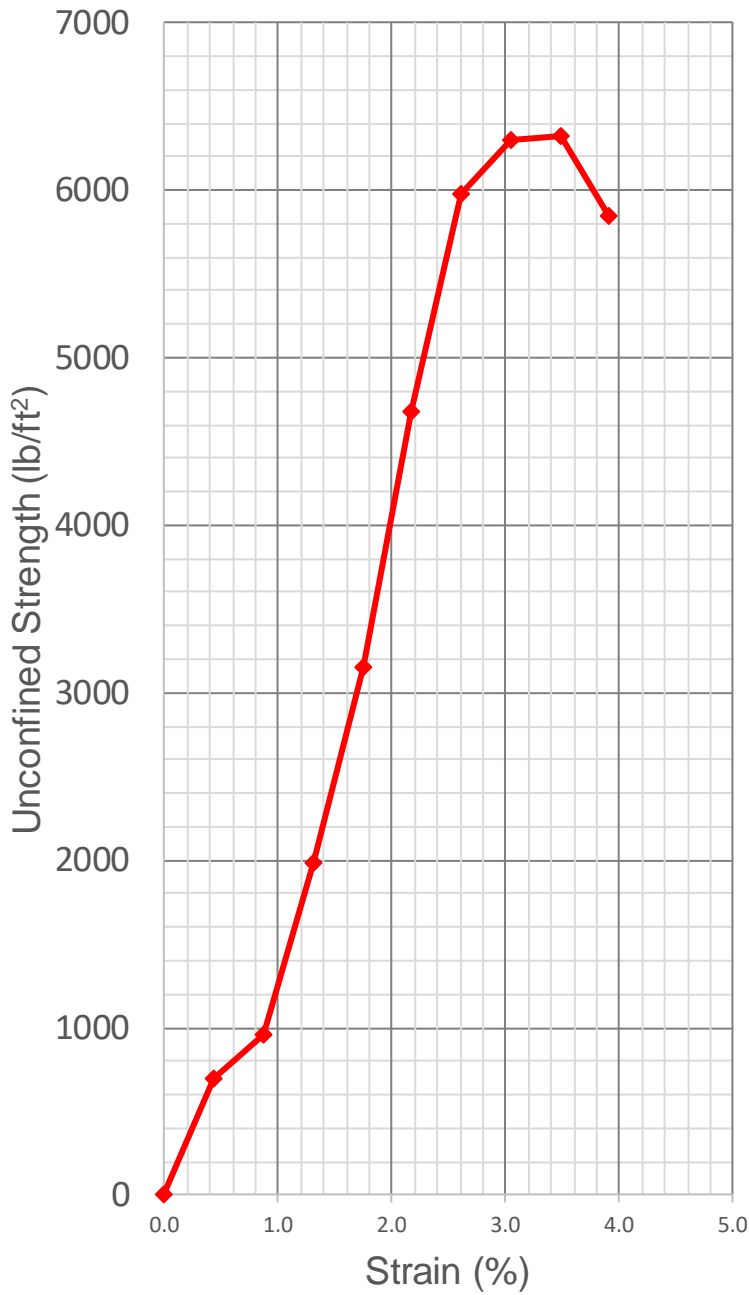
**Depth :** 2

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Red brown silty CLAY with sand some gravel (CL)

**Tested By:** R



Soil Specimen Initial  
 Measurements

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.75 in
Volume	0.01531 ft <sup>3</sup>
Water Content	19.2 %
Wet Density	124.3 pcf
Dry Density	104.3 pcf

Max Unconfined  
 Compressive Strength

Elapsed Time	4 min
Vertical Dial	0.2 in
Strain	3.5 %
Area	0.03310 ft <sup>2</sup>
Axial Load	209.4 lbs
Compressive Strength	6,327 psf

UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-1

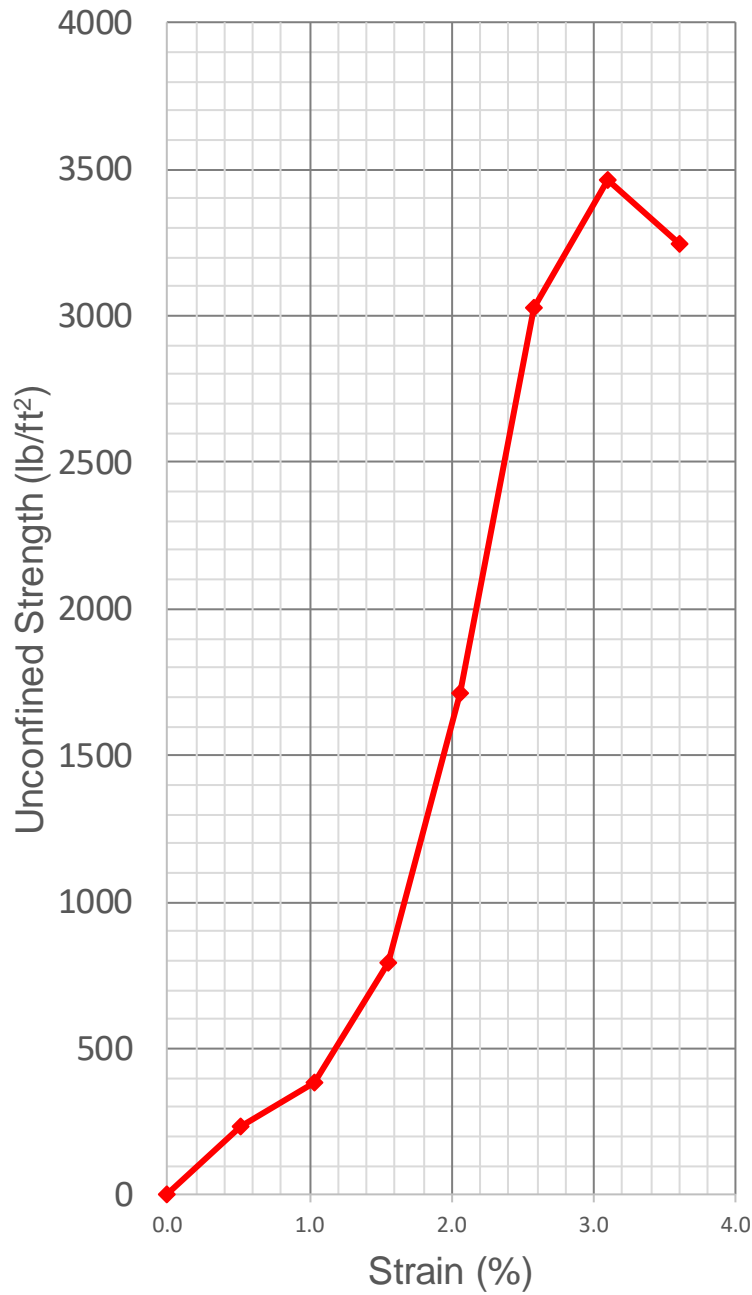
**Depth :** 2

**Project Name:** Mitchell Canyon

**Date:** 8/20/2019

**Description:** Red brown silty CLAY with sand trace gravel (CL)

**Tested By:** R



Soil Specimen Initial  
 Measurements

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	4.85 in
Volume	0.01291 ft <sup>3</sup>
Water Content	12.4 %
Wet Density	112.7 pcf
Dry Density	100.3 pcf

Max Unconfined  
 Compressive Strength

Elapsed Time	3 min
Vertical Dial	0.15 in
Strain	3.1 %
Area	0.03296 ft <sup>2</sup>
Axial Load	114.3 lbs
Compressive Strength	3,467 psf

Atterberg Limits Test – ASTM D4318

**Project Number:** 155-90

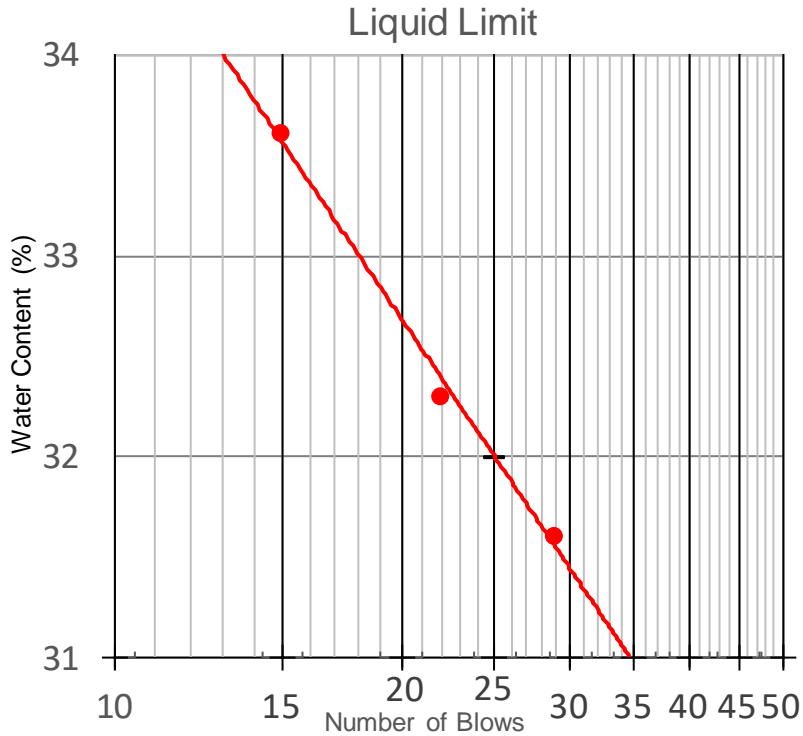
**Project Name:** Mitchell Canyon

**Boring/Sample No:** SFB-1 **Depth:** 2

**Date:** 08-22-19

**Description of Sample:** Red brown silty CLAY with sand trace gravel (CL)

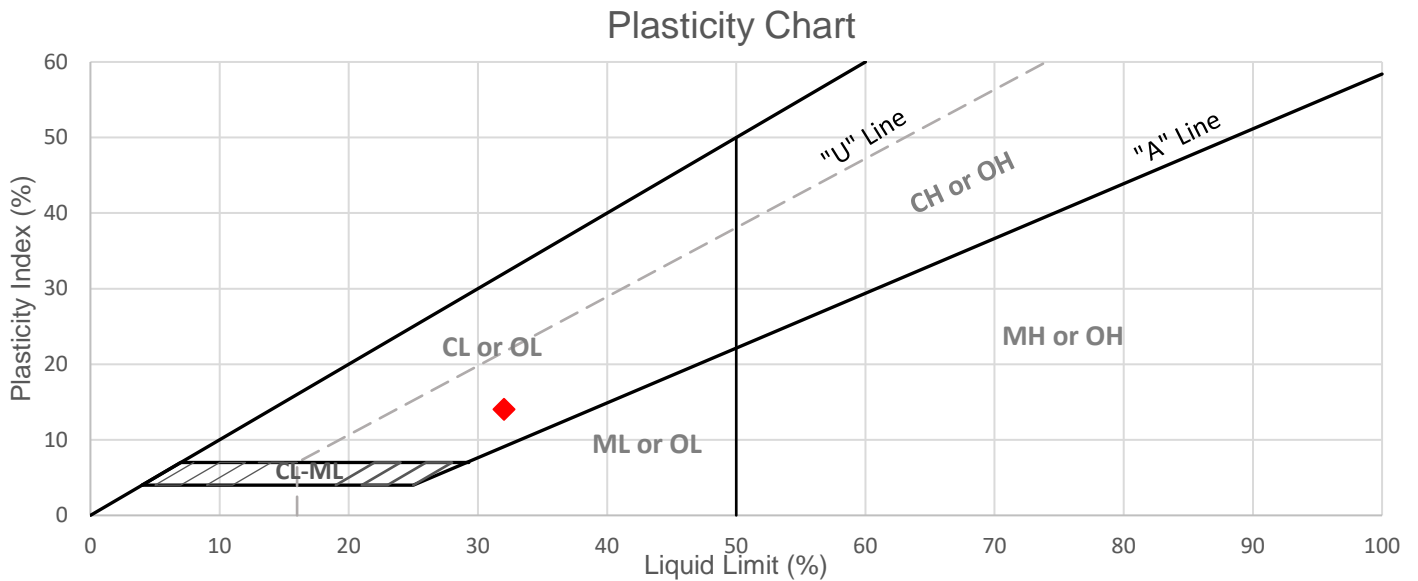
**Tested By** R



Plastic Limit Data			
Trial	1	2	Ave
Water Content (%)	17.4	17.6	17.5

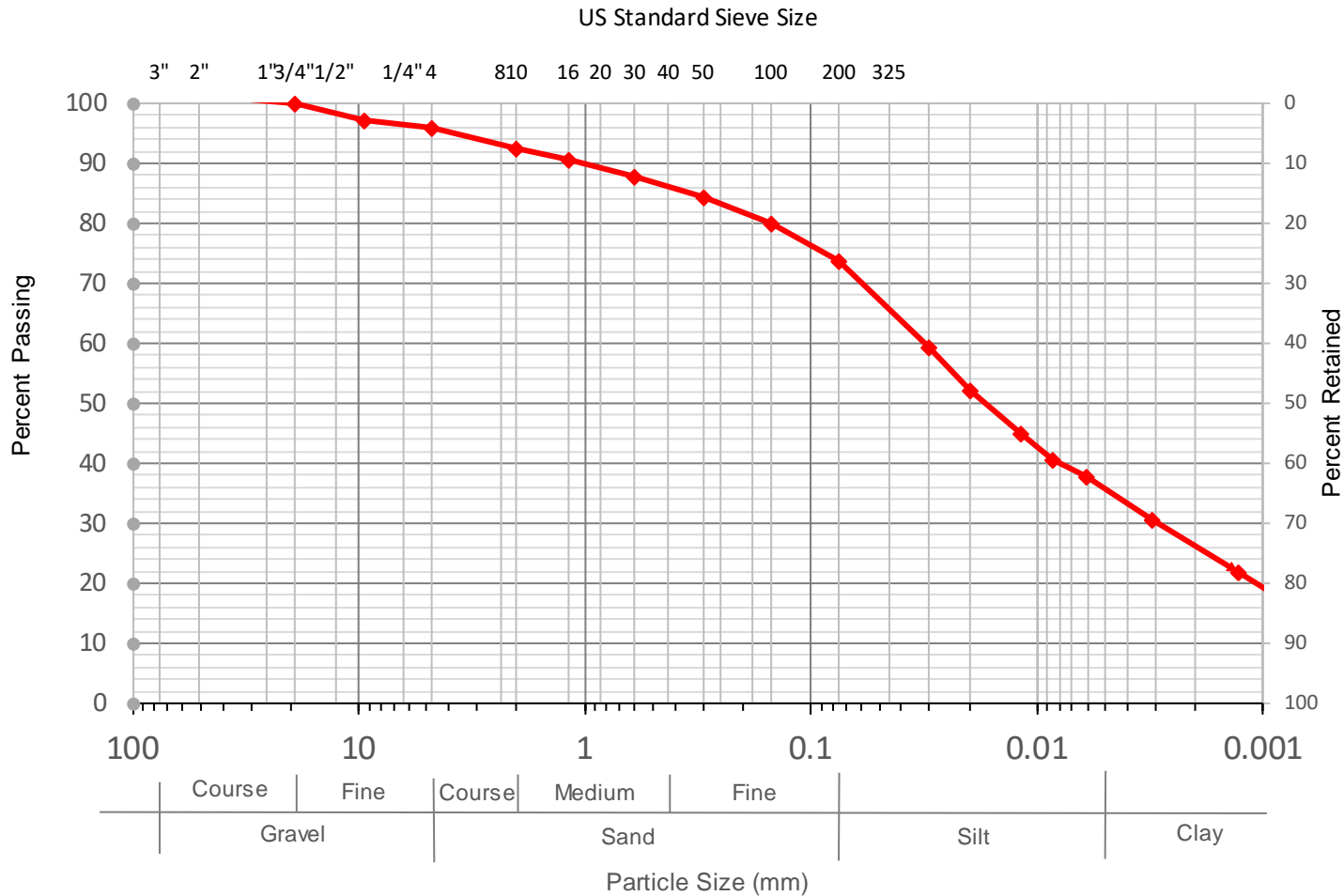
  

Data Summary	
Liquid Limit	<b>32</b>
Plastic Limit	<b>18</b>
Plasticity Index	<b>14</b>
Natural Water Content	<b>12.4</b>
Liquidity Index	<b>-0.400</b>
% Passing #200 Sieve	<b>73.7</b>



Hydrometer Analysis – ASTM D422

**Project Number:** 155-90      **Project Name:** Mitchell Canyon  
**Sample Number:** SFB-1      **Description:** Red brown silty CLAY with sand trace gravel (CL)  
**Depth :** 1.5      **Test Date:** 08-21-19      **Tested By:** R



Composite Sieve Data	
Standard Sieve Size	Percent Passing
3"	
1.5"	
3/4"	100.0
3/8"	97.0
#4	95.9
#10	92.5
#16	90.5
#30	87.7
#50	84.3
#100	79.9
#200	73.7

Particle Diameter (mm)	Percent Soil in Suspension
0.0299	59.5
0.0197	52.2
0.0118	45.0
0.0085	40.6
0.0061	37.7
0.0031	30.5
0.0013	21.8

Atterberg Limits Test – ASTM D4318

**Project Number:** 155-90

**Project Name:** Mitchell

**Canyon Boring/Sample No:**

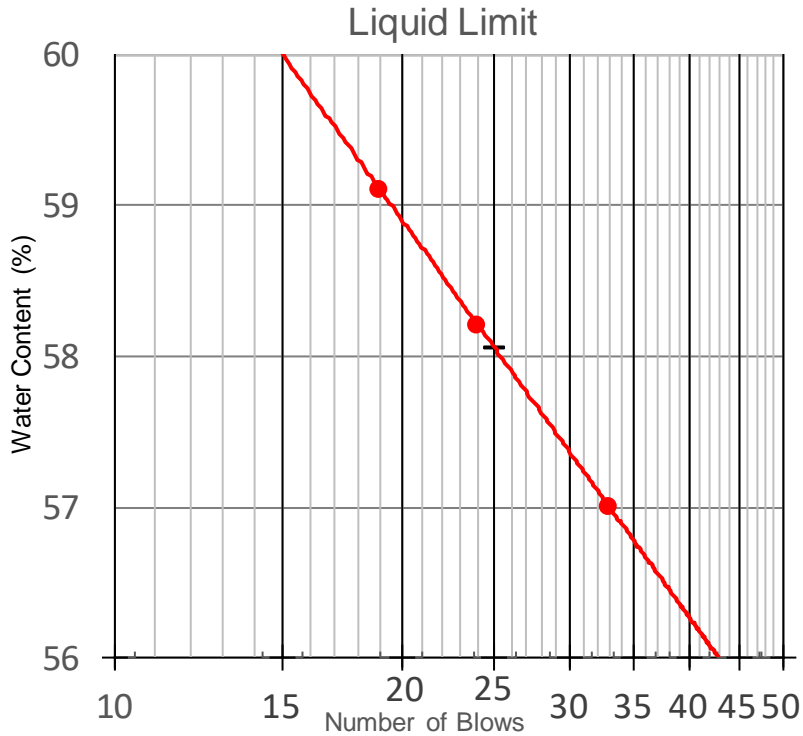
P-2

**Depth:** 1'-2'

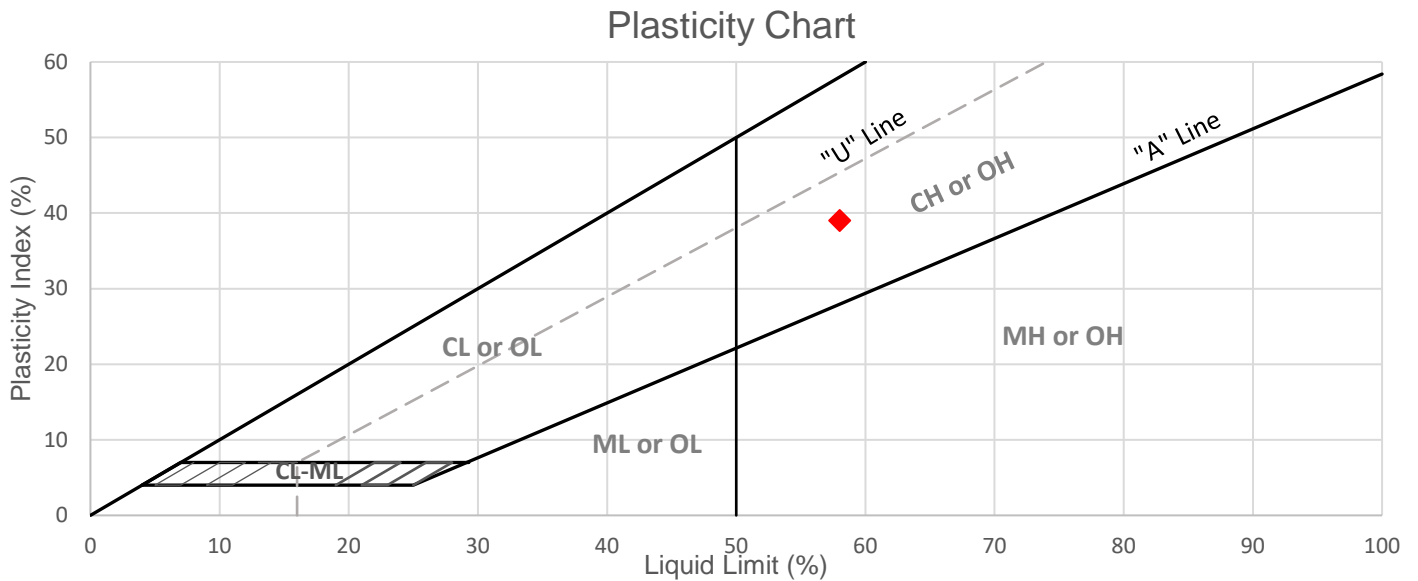
**Date:** 08-26-19

**Description of Sample:** Brown silty CLAY with sand (CH)

**Tested By** R



Plastic Limit Data			
Trial	1	2	Ave
Water Content (%)	18.8	19.1	19.0
Data Summary			
Liquid Limit	<b>58</b>		
Plastic Limit	<b>19</b>		
Plasticity Index	<b>39</b>		
Natural Water Content	<b>20.7</b>		
Liquidity Index	<b>0.044</b>		
% Passing #200 Sieve	<b>80.1</b>		





4 September, 2019

Job No.1908149  
Cust. No.11486

Ms. Hayley Palilla  
Stevens, Ferrone & Bailey  
1600 Willow Pass Court  
Concord, CA 94520

Subject: Project No.: SFB 143-4  
Project Name: Mitchell Canyon Road, Clayton, CA  
Corrosivity Analysis – ASTM Test Methods

Dear Ms. Palilla:

Pursuant to your request, CERCO Analytical has analyzed the soil samples submitted on August 20, 2019. Based on the analytical results, this brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurements, Samples No.001 & No.004 are classified as “corrosive” and Samples No.002 & No.003 are classified as “moderately corrosive”. All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentrations are none detected & 57 mg/kg and determined to be insufficient to attack steel embedded in a concrete mortar coating.

The sulfate ion concentrations are none detected & 430 mg/kg and are determined to be sufficient to potentially be detrimental to reinforced concrete structures and cement mortar-coated steel at these locations. Therefore, concrete that comes into contact with this soil should use sulfate resistant cement such as Type II, with a maximum water-to-cement ratio of 0.55.

The sulfide ion concentrations reflect none detected with a reporting limit of 50 mg/kg.

The pH of the soils ranged from 6.75 to 7.97 which does not present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures.

The redox potentials ranged from 250 to 300-mV. All samples are indicative of potentially “slightly corrosive” soils resulting from anaerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call *JDH Corrosion Consultants, Inc.* at (925) 927-6630.

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,

**CERCO ANALYTICAL, INC.**



J. Darby Howard, Jr., P.E.

President

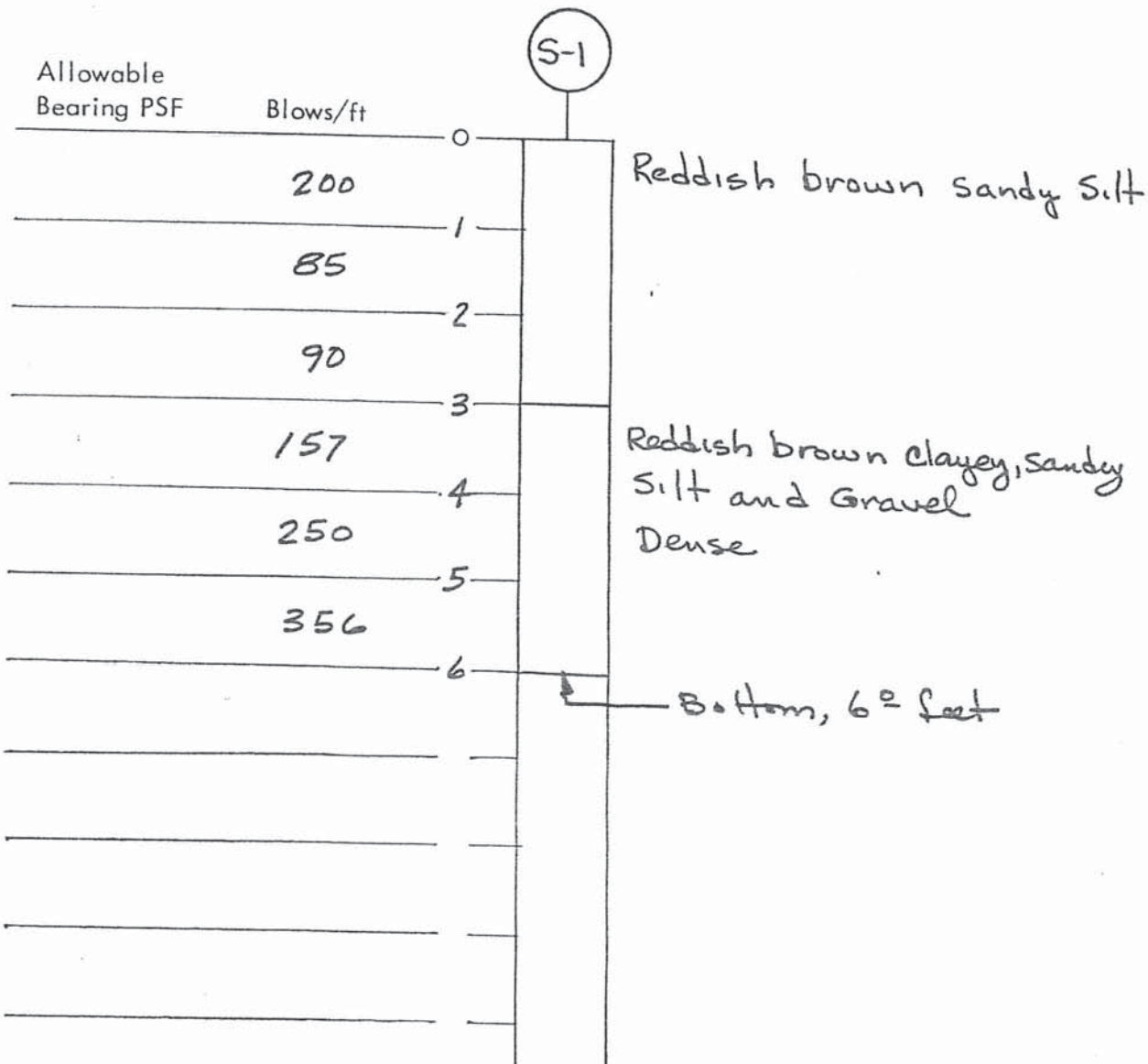
JDH/jdl  
Enclosure



**APPENDIX C**

Logs of Previous Borings by Others

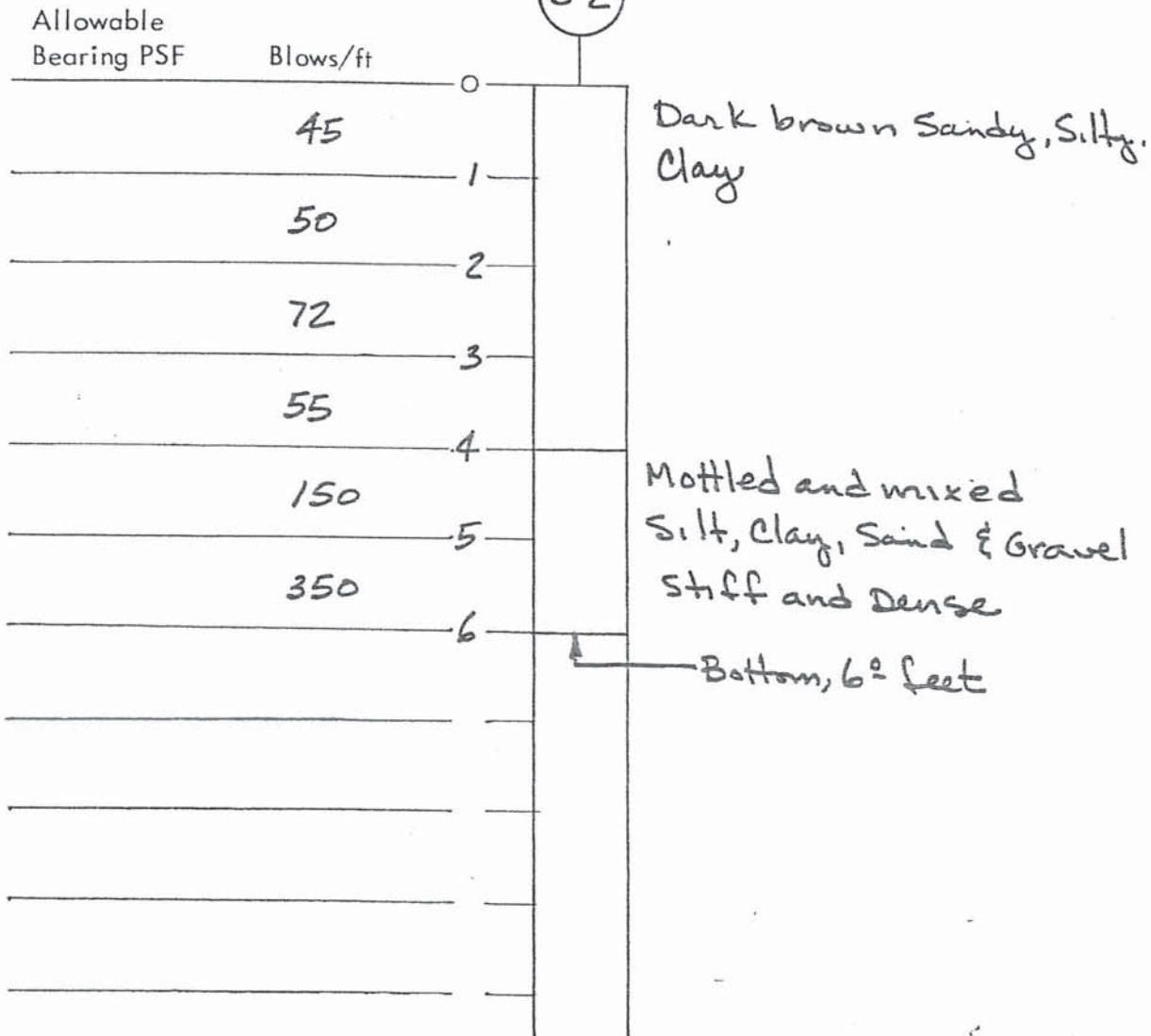
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S borings taken with hand driven "porter-type" one inch sampler. Blow counts based upon 25 pounds falling 15 inches. Blow count is not the standard ASTM blow count ("N" value). For standard ASTM blow count, divide by five. (approximate only).

Location <u>Mitchell Canyon Rd.</u> <u>Clayton</u> Job# <u>166-2</u> Drawn by <u>ARS</u> Date <u>7-13-76</u> Checked by _____ Date _____ Scale <u>1"=2'</u>	LOG OF TEST BORINGS	ABEL R. SOARES and ASSOCIATES soil engineers and geologists 3625 Pinole Valley Road 415-758-5651 Pinole, California 94564
--	---------------------------	--

S-2



S borings taken with hand driven "porter-type" one inch sampler. Blow counts based upon 25 pounds falling 15 inches. Blow count is not the standard ASTM blow count ("N" value). For standard ASTM blow count, divide by five. (approximate only).

Location Mitchell Canyon Rd.  
Clayton  
Job# 166-2  
Drawn by ARS Date 7-13-76  
Checked by \_\_\_\_\_ Date \_\_\_\_\_  
Scale 1" = 2'

LOG  
OF  
TEST BORINGS

ABEL R. SOARES and ASSOCIATES  
soil engineers and geologists

3625 Pinole Valley Road 415-758-5651  
Pinole, California 94564

**APPENDIX D**  
ASFE Guidelines

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# Important Information about Your Geotechnical Engineering Report

*Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.*

*While you cannot eliminate all such risks, you can manage them. The following information is provided to help.*

## **Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects**

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.*

## **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

## **A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors**

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

## **Subsurface Conditions Can Change**

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

## **Most Geotechnical Findings Are Professional Opinions**

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## **A Report's Recommendations Are *Not* Final**

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

### **A Geotechnical Engineering Report Is Subject to Misinterpretation**

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

### **Do Not Redraw the Engineer's Logs**

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

### **Give Contractors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

### **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### **Geoenvironmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

### **Obtain Professional Assistance To Deal with Mold**

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

### **Rely on Your ASFE-Member Geotechnical Engineer for Additional Assistance**

Membership in ASFE/The Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

## **ASFE THE GEOPROFESSIONAL BUSINESS ASSOCIATION**

8811 Colesville Road/Suite G106, Silver Spring, MD 20910  
Telephone: 301/565-2733 Facsimile: 301/589-2017  
e-mail: info@asfe.org www.asfe.org

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**Appendix D**  
**Phase I Environmental Site Assessment**

**Phase I Environmental Site Assessment**  
**CLAYTON TRUST PROPERTY**  
**APNs 121-090-011-2 and 121-090-016-1, Clayton, California**

24 February 2020  
Project No. 20-4996

*PREPARED FOR:*

Mr. Trent Sanson  
DeNOVA HOMES, INC.

*PREPARED BY:*



*Environmental • Compliance • Industrial Hygiene • Geotechnical*  
Phone: 800-511-9300  
Fax: 888-445-8786  
[www.advancedgeo.biz](http://www.advancedgeo.biz)

*"Working in Partnership with People, Business and the Environment"*

**Phase I Environmental Site Assessment  
CLAYTON TRUST PROPERTY  
APNs 121-090-011-2 and 121-090-016-1, California**

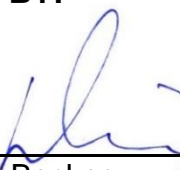
24 February 2020  
Project No. 20-4996

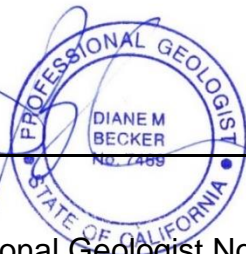


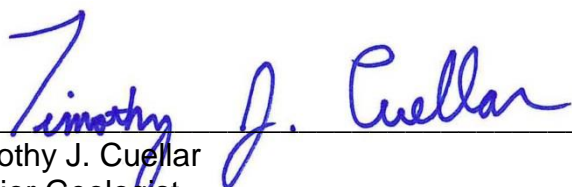
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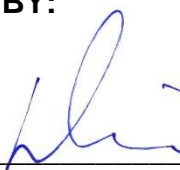
**PREPARED BY:**


  
\_\_\_\_\_  
Diane Becker  
Senior Geologist  
California Professional Geologist No. 7469



  
\_\_\_\_\_  
Timothy J. Cuellar  
Senior Geologist

**REVIEWED BY:**

  
\_\_\_\_\_  
Diane Becker  
Senior Geologist  
California Professional Geologist No. 7469



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## **Figures**

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Appendix A - Photographs of the Subject Property

Appendix B - Historical Documents

Appendix C - Regulatory Records Documentation (with EDR Database Searches)

Appendix D - Interview Documentation

Appendix E - Miscellaneous Documents

Appendix F - Qualifications of the Environmental Professionals

## EXECUTIVE SUMMARY

AdvancedGeo, Inc. (AGI) conducted this Phase I Environmental Site Assessment of the property identified as Contra Costa County Assessor Parcel Numbers (APNs) 121-090-011-2 and 121-090-016-1, Mitchell Canyon Road, Clayton, Contra Costa County, California (subject property or property) in conformance with the scope and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries 'AAI' (40 CFR Part 312).

## PROPERTY USE

The subject property is located on the west side of Mitchell Canyon Road, in a residential area of Clayton, California. The subject property is comprised of two parcels (APN 121-090-011-2 and 121-090-016-1) totaling 8.65 acres. The property consists of vacant, undeveloped land that is covered by overgrown weeds and trees. The northwest section of the property contains a wood tool shed and a water well.

Based on a review of historical documents, the subject property has been undeveloped and utilized agriculturally since at least the 1939. By the early 1980s, the land was no longer used agriculturally and has been vacant and undeveloped through the present.

## FINDINGS

Based on the standards set by ASTM Standard Practice E1527-13, a recognized environmental condition (REC) is the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. Conditions that are determined to be *de minimis*, which do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, are not recognized environmental conditions. Conditions that are considered Business Environmental Risk include the presence of asbestos-containing materials, lead-based paint, mold or moisture conditions, or non-hazardous regulated materials.

The standard further identifies historical RECs and controlled RECs. An historical REC (HREC) is 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. A controlled REC (CREC) is 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 findings are differentiated below as Business Environmental Risks and *de minimis* conditions unlikely to be subject to government enforcement, HRECs, CRECs and RECs.

## BUSINESS ENVIRONMENTAL RISKS

This assessment has revealed no evidence of potential Business Environmental Risks in connection with the subject property.

## DE MINIMIS CONDITIONS

This assessment revealed no evidence of potential or *de minimis* conditions in connection with the subject property, except

## HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITION

This assessment has revealed no evidence of HRECs in connection with the subject property, except

## CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITION

This assessment has revealed no evidence of CRECs in connection with the subject property, except

## RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed no evidence of RECs in connection with the subject property, except

## CONCLUSIONS AND OPINION

AGI, Inc. has performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527-13, US-EPA AAI for the property located at Mitchell Canyon Road, Clayton, California. It is the opinion of the environmental professionals that the findings and conclusions presented in this report are reasonable and prudent, given the evidence as presented. AGI did not identify any REC's on the subject property during the course of the Phase I. AGI has no recommendations for additional investigations at the subject property at this time.

## 1.0. INTRODUCTION

AdvancedGeo, Inc. (AGI) has been retained by DeNova Homes to perform a Phase I Environmental Site Assessment (Phase I) of the property identified as Contra Costa County Assessor Parcels Numbers (APNs) 121-090-011-2 and 121-090-016-1, Mitchell Canyon Road, Clayton, Contra Costa County, California (hereafter referred to as subject property or property). The Phase I was performed in conformance with the scope and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for 'All Appropriate Inquiries (AAI)' (40 CFR Part 312). The Phase I is designed to provide the Client (user) with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

### 1.1. PURPOSE

The purpose of the Phase I is to identify and assess environmental characteristics of the subject property that could lead to liability in the event of ownership, that could have a potential impact on property value or that could impact the present or future use of the subject property.

The purpose of ASTM Standard Practice E1527-13 and USEPA AAI is to define good commercial and customary practice for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and petroleum products. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability: that is, the practice that constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35)(B). An evaluation of business environmental risk associated with a parcel of commercial real estate may necessitate investigation beyond that identified in this practice (based on ASTM Practice E1527-13).

The goal of ASTM Standard Practice E1527-13 is to identify recognized environmental conditions (RECs) in connection with the subject property. A REC is defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. Conditions that are determined to be de minimis, which do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, are not recognized environmental conditions.

The standard further identifies historical RECs and controlled RECs. An historical REC (HREC) is 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. A controlled REC (CREC) is 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.



## 1.2. SITE DESCRIPTION

The subject property is located on the west side of Mitchell Canyon Road, in a residential area of Clayton, California. The subject property is comprised of two parcels (APN 121-090-011-2 and 121-090-016-1) totaling 8.65 acres. The property consists of vacant, undeveloped land that is covered by overgrown weeds and trees. The northwest section of the property contains a wood tool shed and a water well. Further property location descriptions, characteristics, improvements, and site vicinity characteristics are discussed below.

### 1.2.1. Location and Legal Description

The subject property location can be identified as the following:

<b>Site Address(es)</b>	None
<b>Assessor's Parcel Number(s) (APN)</b>	1) 121-090-011-2 2) 121-090-016-1
<b>Property Owner</b>	CLAYTON FRED B TRE ISOBE KAREN E
<b>Land Use Type</b>	1) MISCELLANEOUS 2) VACANT
<b>Zoning</b>	Not provided
<b>Legal Description</b>	1) POR NW QR SEC 14 T1N R1W 4.51 AC 2) POR NW QR SEC 14 T1N R1W 4.14 AC
<b>Size of Property</b>	1) 4.510-acres 2) 4.140-acres TOTAL 8.65-acres

The parcel map and owner information were provided by ParcelQuest/CD Data as a representation of current data downloaded monthly from the County Assessor's Office. Copies of the parcel map and the owner information are provided in Appendix B.

### 1.2.2. Site and Vicinity General Characteristics

The subject property is located within a residential area of the City of Clayton, Contra Costa County, California. Figure 1 shows the setting of the subject property (7.5 Minute United States Geological Survey [USGS] Topographic Series, Clayton, California). Photographs of the subject property are provided in Appendix A.

### 1.2.3. Current Use of Property

The property is currently undeveloped, vacant land.

### 1.2.4. Proposed Use of Property

It is AGI's understanding that the proposed future property use is residential.

### 1.2.5. Property Utilities

There are no current or historical utilities serving the subject property.

### 1.3. DETAILED SCOPE-OF-SERVICES

Except where identified in Section 8.1., the scope of work for this Phase I conforms to ASTM Standard Practice E1527-13 and the USEPA AAI (40 CFR Part 312). Any additional User requested scope of services are discussed in Section 7.0.

### 1.4. SIGNIFICANT ASSUMPTIONS

Our professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields. Findings were based mainly upon examination of historical records, maps, aerial photographs and government agency lists, on a site reconnaissance visit, and on information obtained during personal interviews with persons of long term familiarity with the subject property as specified in ASTM E1527-13 and the USEPA AAI. Hazardous waste site lists presented in this report represents only a search of specific government records as listed below. AGI is aware additional government records may exist. It should be noted that government agencies often do not list all sites with environmental contamination or that the list could be inaccurate and/or incomplete.

Groundwater flow and depth to groundwater, unless otherwise specified by on-site well data, or well data from adjacent sites, are assumed based on geologic interpretations from available sources. AGI assumes the property has been correctly and accurately identified by the client, designated representative of the client, property contact, property owner, and property owner's representatives.

### 1.5. LIMITATIONS AND EXCEPTIONS

Property conditions, as well as local, state, tribal and federal regulations can change significantly over time. Therefore, the recommendations and conclusions presented as a result of this study apply strictly to the environmental regulations and property conditions existing at the time the study was performed. Available information has been analyzed using currently accepted assessment techniques and it is believed that the inferences made are reasonably representative of the property. AGI makes no warranty, expressed or implied, except that the services have been performed in accordance with generally accepted environmental property assessment practices applicable at the time and location of the study.

Considerations identified as beyond the scope of an ASTM Phase I that may affect business environmental risks at a property include the following: asbestos-containing materials (ACMs); biological agents; cultural and historic resources; ecological resources; endangered species; health and safety; indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment; industrial hygiene; lead-based paint (LBP); lead in drinking water; mold; radon; regulatory compliance; and wetlands. These environmental issues may warrant assessment based on the type of property or transaction, however, they are considered non-scope issues under ASTM Practice E1527-13. Any addition of non-scope items must be agreed upon between the user and AGI prior to initiation of the Phase I.

The Phase I Environmental Site Assessment is not, and should not be construed as, a warranty or guarantee about the presence or absence of environmental contaminants that may affect the property. Neither is the assessment intended to assure clear title to the property in question. The sole purpose of investigation into property title records is to ascertain a historical basis of prior land use. All findings, conclusions, and recommendations stated in this report are based upon facts, circumstances, and industry-accepted procedures for such services as they existed at the time this report was prepared (i.e., federal, state, and local laws, rules, regulations, market conditions, economic conditions, political climate, and other applicable matters). All findings, conclusions, and recommendations stated in this report are based on the data and



information provided, and observations and conditions that existed on the date and time of the property visit.

### 1.6. SPECIAL TERMS AND CONDITIONS

There were no special terms or conditions, agreed upon by the environmental professional, beyond the initial agreed upon scope of work, used in preparation of this report.

### 1.7. USER RELIANCE

Conclusions and recommendations in this report are based on findings regarding historical use of the site, and on features noted during the site reconnaissance. The absence of any potential gross contamination sources, historic or present, does not necessarily imply that the site is free of any contamination. This report only represents a 'due diligence' effort as to the current environmental status of the site. No other warranty, expressed or implied, is made as to the professional recommendations contained in this report.

## 2.0. USER PROVIDED INFORMATION

According to the ASTM Standard E1527-13 and the USEPA AAI, in order to qualify for one of the Landowner Liability Protections (LLPs) to CERCLA liability offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the client (user) must provide to the environmental professional the following information (if available) in relation to the subject property:

<b>Title Records</b>	A review of Title Records was not requested by the user.
<b>Environmental Liens or Activity and Use Limitations</b>	An environmental lien or AUL's (activity and usage limitations) search was not requested by the user.
<b>Specialized Knowledge</b>	AGE was not provided any specialized knowledge by the user and does not have any specialized knowledge of this property outside of what is contained in this report. The property ownership and tenants as well as all individuals who were interviewed as part of this investigation, have not reported any specialized knowledge of this property outside of what is contained in this report.
<b>Commonly Known or Reasonably Ascertainable Information</b>	The user provided no commonly known or reasonably ascertainable information available within the local community about the subject property that is material to recognized environmental conditions in connection with the property.
<b>Valuation Reduction for Environmental Issues</b>	No property valuation reduction related to environmental issues or concerns was reported by the user.
<b>Owner, Property Manager, and Occupant Information</b>	No written or verbal communication with the property owner, manager and/or occupant revealed any information which suggested that there are currently or historically any recognized environmental conditions associated with the subject property not noted in this assessment.
<b>Reason for Performing Phase I</b>	Potential property transaction
<b>Other</b>	No modifications to the ASTM E1527-13 standard scope-of-services were requested by the user for special circumstances that might be encountered at the subject property. Any additional user requested scope of services are discussed in Section 7.0.

Failure to provide the above information could result in a determination that 'all appropriate inquiries' are not complete. Additional items should be collected, if available, and provided to AGI.



### 3.0. RECORDS REVIEW

The purpose of obtaining and reviewing subject property and site vicinity historical, physical setting, and regulatory records is to help identify *recognized environmental conditions* in connection with the subject property.

#### 3.1. HISTORICAL USE INFORMATION

The objective of consulting historical sources for a Phase I is to develop a history of previous uses of the property and surrounding area to help identify the likelihood of past uses having led to recognized environmental conditions with respect to the property. All obvious uses shall be identified from the present to the property's first obvious developed use, or back to 1940, whichever is earlier. Review of standard sources at less than five year intervals is not required.

##### 3.1.1. Historical Use Information on Subject Property

Subject property history was researched by reviewing historical Sanborn Fire Insurance Maps (no coverage), aerial photographs, topographic maps, telephone directory information, the Building Dept name records, and the Contra Costa County Assessor's Office records.

Based on a review of historical documents, the subject property has been undeveloped and utilized agriculturally since at least the 1939. By the early 1980s, the land was no longer used agriculturally and has been vacant and undeveloped through the present.

In summary, review of the historical documents revealed no features on the subject property of environmental concern. Representative historical records are provided within Appendix B.

##### 3.1.1.1. Sanborn Fire Insurance Maps

Sanborn Fire Insurance maps were developed in the late 1800s and early 1900s for use as an assessment tool for fire insurance rates in urbanized areas but are now utilized as a valuable source of historical and environmental risk information. EDR owns the largest collection of Sanborn Fire Insurance Maps. AGI requested EDR to provide any Sanborn Fire Insurance Maps that might cover the subject property. Sanborn map coverage was not available for the subject property.

A review of historical Sanborn Fire Insurance Maps did not reveal any items of environmental concern in connection with the subject property.

##### 3.1.1.2. Aerial Photographs

AGI reviewed aerial photographs of the subject property and surrounding area that were provided by EDR as well reviewed online (Google Earth) for the years 1939, 1946, 1949, 1950, 1958, 1963, 1966, 1979, 1982, 1993, 1998, 2006, 2009, 2012 and 2016. The following is a summary of our review of the aerial photographs:

Year(s)	Subject Property	Surrounding Area
1938	Northeast area of property appears to be developed agriculturally with an orchard.	Mitchell Canyon Road is visible adjacent to the east of the northeast area of the property. orchards are visible to the north and south of the eastern portion of the

Year(s)	Subject Property	Surrounding Area
		property. Adjacent properties to the west and south are undeveloped. .
1946, 1949, 1950, 1958	The majority of the property is developed with an orchard.	Similar to previous photograph with some additional agricultural development visible in the surrounding area.
1963	Much of the orchard previously visible is no longer present. Only remnants of the orchard are visible.	Residential development is visible beyond Mitchell Canyon Road to the east. The remaining adjacent properties appear similar to the previous photograph.
1966	Similar to previous photograph. No significant changes are apparent.	Residential development is visible adjacent to the south, southeast and to the east beyond Mitchell Canyon Road. Areas to the west, north and southwest appear similar to the previous photograph.
1979, 1982	Similar to previous photograph.	Similar to previous photograph with residential development now visible to the west and north.
1993, 1998	Similar to previous photograph except a very small shed is visible in the central area of the property. with the orchard remnants becoming less visible.	An increase in residential development is now visible to the west and north. The remaining adjacent properties appear similar to the previous photograph. A significant increase in residential development is visible in the surrounding area. The surrounding area
2006, 2009, 2012, 2016	Similar to previous photographs. No significant changes are visible.	Similar to previous photographs. No significant changes are visible.

A review of historical aerial photographs did not reveal any items of environmental concern in connection with the subject property.

### 3.1.1.3. Historical Topographic Maps

AGI reviewed historical topographic maps of the subject property and surrounding area that were supplied by EDR for the years 1896, 1898, 1912, 1943, 1953, 1968, 1973, 1980, 1994 and 2012. The following is a summary of our review of the topographic maps:

Year(s)	Subject Property	Surrounding Area
1896, 1898	Mapped in an undeveloped area southwest of the city of Clayton. No roads or property use features are mapped on the property.	Undeveloped land. No property use features are mapped.
1912, 1943	Undeveloped land. No property use features are mapped.	A road in the location of current day Mitchell Canyon Road is mapped adjacent to the east and beyond agricultural use is mapped. No property use features are mapped to the north, south and west.
1953	The northeastern portion of the property is mapped as agricultural use with the remainder of the property undeveloped.	Agricultural use is mapped adjacent to the north and southeast and beyond Mitchell Canyon Road to the east. .
1968	Undeveloped land. No property use features are mapped.	Adjacent properties to the east beyond Mitchell Canyon Road and to the southeast are mapped with urban tint and residential development. The adjacent property to the north is mapped with small small building footprint and the adjacent property to the west is undeveloped.

Year(s)	Subject Property	Surrounding Area
1973	The northeastern portion of the property is mapped as agricultural, the remainder of the property is not mapped with any property use features.	Similar to previous map. No significant changes re mapped.
1980, 1994	Undeveloped land. No property use features are mapped.	Similar to previous map except residential development is now mapped adjacent to the northeaster and west
2012	No property use features are mapped.	No property use features are mapped. except additional small roads indicative of residential development..

A review of historical topographic maps did not reveal any items of environmental concern in connection with the subject property.

#### 3.1.1.4. Street Directories

AGI requested that EDR provide a review of city and street directories to determine the occupancy history of the property. However, no address is associated with the property.

#### 3.1.1.5. Building Department Records

Since no address is associated with the property, the Clayton Building Department was unable to provide any building permit records.

#### 3.1.1.6. Assessor's Records

A review of Contra Costa County Assessor's records was not conducted since the property owners permission could not be obtained to review records.

#### 3.1.1.7. Previous Phase I and II Environmental Site Assessments

Previous Phase I and II Environmental Site Assessments were provided to AGI by the user and/or property owner during the course of this Phase I and included the following:

##### Phase I Environmental Site Assessment, AEI, August 2019

At the time of the Phase I report, the property was undeveloped land except for a small shed located in the northwestern area of the site. AEI identified Other Environmental Conditions (OECs) were identified at the property including a potential that agricultural chemicals such as pesticides, herbicides and fertilizers were used on site, based on the past agricultural use. AEI also indicated that the City of Clayton Planning Department does not have explicit soil sampling requirements for residential development. Therefore, AEI recommended soil sampling be conducted to determine if the property had been significantly impacted by the past agricultural use.

##### Limited Soil Sample Investigation, September 2019

Based on the finding of the Phase I report completed in August 2019, to screen for the presence of agricultural chemicals that may be present due to the past agricultural sue of the property. Several soil samples were collected across the property and analyzed for organochlorine pesticides (OCPs), metals and petroleum hydrocarbons. Findings from the investigation indicated arsenic was detected in five of the soil samples at



concentrations above the residential Environmental Screening Level but are below the typical background concentrations. Lead was detected five of the soil samples at background concentrations. The soil sample analyzed for metal contained various metals well below at background concentrations. TPH as gasoline, diesel, and oil were detected in the same sample at very low concentrations (below their respective Environmental Screening Levels (ESLs)). OCPs were not detected above the laboratory reporting limits in any of the soil samples collected. AEI indicated no further investigation was warranted relative to OCPs, metals, or TPH in shallow soils at the site.

### 3.1.2. Historical Use Information on Adjoining Properties

Historical use of immediately adjoining properties was undeveloped or agricultural until the mid 1960s when residential development began to the southeast. By the 1970s, increased residential development occurred to the west. By the early 1990s, residential development had occurred to the north. The area to the south fo the western portion of the property has remained undeveloped.

Historical uses of adjoining properties do not appear to be of environmental concern to the subject property.

## 3.2. PHYSICAL SETTING

<b>Geology</b>	The subject property is situated within the Coast Ranges Geomorphic Province of California, which is characterized by nearly parallel northwest-trending ridges interspersed with alluvium-filled valleys. Terraces and alluvial fans border the ridges of the Coast Ranges before they hit the San Francisco, San Pablo, and Suisun Bays and merge into tidal flats along the bay margins. The Coast Ranges were structurally formed by faulting and folding of the Farallon and North American plates, recorded by rocks of the Franciscan Complex of Cretaceous and Jurassic age (100 to 65 million years old). This geomorphic province contains coastal foothills and mountains and extends from the Tehachapi Mountains in the south to the Klamath Mountains in the north. Western and eastern boundaries of this province are comprised of the Pacific Ocean and the Great Valley Geomorphic Province, respectively.
<b>Hydrology</b>	The subject property lies within the Clayton Valley Subbasin (2-005). The Clayton Valley Groundwater Basin is located in northern Contra Costa County along the south shore of Suisun Bay. The basin is about 40 miles northeast of San Francisco. It is bounded by Suisun Bay on the north, Mt Diablo Creek on the east, the Concord Fault on the west, which divides this separates this basin from the Ygnacio Valley groundwater basin, and the foothills of Mount Diablo on the south. The cities of Concord and Clayton overlie the Clayton Valley Basin. Clayton Valley is underlain by thick alluvial deposits which cover a faulted and folded complex of consolidated Cretaceous and Tertairy rocks. The water bearing units in the basin can be found in the Recent alluvium and the older alluvium valley fill deposits. The combined thickness of these deposits exceeds 700 feet. Aquifers in the basin area are hydrologically connected to Suisun Bay (DWR 1975). Depth to groundwater in the vicinity of the site is greater than 50 feet below surface grade (bsg) based on data from a nearby site at 2484 Pine Hollow Road, obtained from the State of California's Geotracker database.
<b>Topography</b>	The property is located at an elevation of approximately 493 feet above mean sea level (MSL), in an area of moderate topographic relief. Regional slope of the area is toward the general east-northeast.
<b>Surface Soils</b>	EDR provides a report listing dominant soil composition in the general area of the subject property based on information from the United States Department of Agriculture's Soil Conservation Service STATSGO (State Soil Geographic Database) soil maps. Soil surface texture at the subject property consists of soil identified as PERKINS, a gravelly loam and GILROY a clay loam, both in the Class C

<b>Surface Soils</b>	Hydrogeologic Group which includes slow infiltration rates. Corrosion potential of this soil for uncoated steel is moderate.
<b>Surface Water Features</b>	There are no surface water features on the subject property. The nearest surface water feature in the vicinity of the subject property is Mitchell Creek, located approximately 450 feet to the east.
<b>Flood Zone</b>	The EDR database report shows that the subject property is not located within either a Special Flood Zone Hazard Area (1%) or a 0.2% Annual Chance Flood Zone. This data, available in select counties across the country, was obtained by EDR from the Federal Emergency Management Agency (FEMA) which has maps depicting FEMA-defined 100-year and 500-year flood zones.
<b>Wetlands</b>	The EDR database report shows that the subject property is not located within the National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR from the U.S. Fish and Wildlife Service.

### 3.3. STANDARD ENVIRONMENTAL RECORD SOURCES

A computer search of federal, state and regional regulatory agency databases was performed by Environmental Data Resources Inc. (EDR), a data retrieval company, to identify and locate properties in areas of concern that have been reported as sites known or suspected to contain underground storage tanks, or to have been the scene of hazardous materials spills. Additionally, sites permitted to manufacture, utilize, generate, store, treat or dispose of hazardous materials and/or hazardous wastes are identified and located. A list and description of databases investigated, in compliance with ASTM E1527-13 and USEPA AAI, is included in EDR Report provided in Appendix C.

#### 3.3.1. SUBJECT PROPERTY DATABASE SEARCH

The property location on Mitchell Canyon Road, Clayton, California, was not identified on any governmental databases within the EDR Report.

#### 3.3.2. SITE VICINITY DATABASE SEARCH

Sites with recognized environmental conditions surrounding the subject property are typically of concern to the subject property when they are located in an up-gradient direction from the property with respect to the ground water flow direction. Typically, groundwater would represent the migration medium for contaminants over significant distances. Sites located in equi-gradient or down-gradient directions from the subject property are less likely to impact the subject property.

AGI retained EDR to provide current regulatory database information compiled by a variety of federal and state regulatory agencies. A copy of the complete database is included in Appendix C. The following information was obtained:

AGI's review of the referenced databases also considered the potential or likelihood of contamination from adjoining and nearby sites. To evaluate which of the adjoining and nearby sites identified in the regulatory database report present an environmental risk to the subject property, AGI considered the following:

- The type of database on which the site is identified;
- The topographic position of the identified site relative to the subject property;
- The direction and distance of the identified site from the subject property;
- Local soil conditions in the subject property area;



- The known or inferred groundwater flow direction in the subject property area;
- The status of the respective regulatory agency-required investigation(s) of the identified site (if any); and
- Surface and subsurface obstructions and diversions (e.g., buildings, roads, sewer systems, utility service lines, rivers, lakes and ditches located between the identified site and the subject property.

No sites were identified on the EDR database report listed on the regulatory database report that were judged to present a potential environmental risk to the subject property.

### 3.4. ADDITIONAL ENVIRONMENTAL AGENCY RECORD SOURCES

In addition to the EDR computer search of federal, state and regional regulatory agency databases, AGI contacted appropriate regulatory agencies to review records regarding the property and surrounding sites identified as having recognized environmental conditions that have the potential to impact the subject property based on ground water flow direction, distance from the subject property and nature of the releases causing the environmental condition.

Additional agency searches include the following:

- Contra Costa County Environmental Health Department (CCCEHD) and the San Francisco Bay Regional Water Quality Control Board [Example: Central Valley Regional Water Quality Control Board] (Regional Board) maintain records of industrial violations for this area and are the lead agencies for the enforcement of the State Underground Storage Tank and Hazardous Waste Laws for Contra Costa County. AGI requested to review any files that were available.
- The Regional Board also maintains an online computer database, GeoTracker, that provides listings of closed and active sites related to unauthorized releases of hydrocarbons as well as solvents, metals, and other materials. For listed sites, online reports are commonly available. AGI reviewed the GeoTracker database for information that may be available for the subject property or surrounding sites.
- The California Department of Toxic Substances Control (DTSC) is the State of California agency responsible for oversight of hazardous waste regulations, cleanup of existing contamination, pollution prevention and reduction in hazardous waste and toxic materials and identification of potential new pollutants. The DTSC maintains the EnviroStor Data Management System (ENVIROSTOR) which allows for the search for information on investigation, cleanup, permitting and/or corrective actions that are planned, being conducted or have been completed under DTSC oversight. AGI reviewed the ENVIROSTOR database for any information that may be available.
- The United States Environmental Protection Agency (USEPA) provides an online computer database, ENVIROFACTS, providing lists of sites listed on multiple USEPA databases. AGI reviewed the ENVIROFACTS database for any information that may be available.
- The Geologic Energy Management Division's (CalGEM) online mapping application presents California's oil and gas industry information from the geographic perspective. AGI reviewed the CalGEM well database for information that may be available for the subject property or surrounding sites.

### 3.4.1. Additional Subject Property Record Sources

The subject property address was searched on the following record sources:

<b>SOURCE</b>	<b>SUMMARY</b>
Regional Board & GeoTracker database	Property location was not identified on the GeoTracker database and did not have any records on-file with the Regional Board.
DTSC & ENVIROSTOR database	Property location was not identified on the ENVIROSTOR database and did not have any records on-file with the DTSC.
USEPA ENVIROFACTS	Property location was not identified on the ENVIROFACTS database.
CCCEHD	Property location was not identified as having records on-file with the CCCEHD.
CalGEM Well Finder	According to the CalGEM Well Finder, no oil and/or gas wells are located in the vicinity of the subject property.

### 3.4.2. Additional Site Vicinity Record Sources

The CCCEHD and Regional Board maintain records for, and are responsible for, enforcement of state UST and hazardous waste laws. AGI commonly reviews files for up-gradient sites under active environmental regulation to ascertain the current site status and its potential to impact the subject property. No sites, under active or past environmental regulation, were identified by the database search within the required search radius of potential concern to the property.

## 3.5. PROVIDED SUBJECT PROPERTY RECORDS

No records were provided to AGI by the user and/or property owner during the course of this Phase I with the exception of the Phase I and Limited Soil Sampling investigations discussed above in Section 3.11.7.

## 3.6. VOLATILE ORGANIC COMPOUND VAPOR ENCROACHMENT

The encroachment of hydrocarbon and volatile organic compound (VOC) vapors into soil pore space occurs when organic chemicals migrate from contaminated groundwater or soil into the airspace between soil particles. Some typical organics involved are petroleum based or chlorinated solvents (e.g, BTEX and dry cleaning chemicals). They may have leaked into the groundwater and/or soil from underground storage tanks, or buried waste, or from disposal in septic systems.

In compliance with ASTM Standard E2600-15 (Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions), AGI evaluated the potential for a Vapor Encroachment Condition (VEC) at the subject property. Based on a VEC screening, it was determined that 'a VEC does not exist' at the property. A copy of the AGI-generated Tier 1 VEC screening form is provided within Appendix E.

## 4.0. SITE RECONNAISSANCE

A subject property site reconnaissance was conducted by an AGI representative on 20 February 2020. At the time of the site visit the weather was clear and warm. Primary features of the property are shown in a site plan provided in Figure 2. Photographs of selected features of the subject site are included in Appendix A.

#### 4.1. METHODOLOGY AND LIMITING CONDITIONS

The property was fully accessible during the site reconnaissance. No limiting conditions were noted except for the tool shed (northern parcel) being locked.

#### 4.2. GENERAL SITE SETTING

The following is a description of the subject property:

- The subject property is located on the west side of Mitchell Canyon Road, in a residential area of Clayton, California. The subject property is comprised of two parcels (APN 121-090-011-2 and 121-090-016-1) totaling 8.65 acres.
- The majority of the subject property consists of vacant, undeveloped land that is covered by overgrown weeds and trees. The northwest section of the property contains a wood tool shed and a water well.

The following is a description of the property improvements:

<b>Structures</b>	An approximate 10 foot by 20 foot wood shed was observed in the northern parcel. No other structure were observed at the subject property.
<b>Adjoining / Access / Egress Roads</b>	Access to the subject property is through drive-way gate on Mitchell Canyon Road.
<b>Surface Types</b>	Undeveloped land with vegetation and trees.
<b>Additional Features</b>	A water well was observed in the northern parcel near the tool shed.
<b>Surface Water</b>	No surface water features observed at the subject property.

At the time of the site reconnaissance, current uses of adjacent properties included the following:

<b>North</b>	Residential
<b>South</b>	Undeveloped
<b>East</b>	Residential
<b>West</b>	Residential

Current uses of the adjoining properties do not appear to be of potential environmental concern to the subject property.

#### 4.3. EXTERIOR AND INTERIOR OBSERVATIONS

The following was observed at the time of the property reconnaissance:

<b>OBSERVED</b>	<b>CONDITION OBSERVED ON/AT SUBJECT PROPERTY</b>
No	Pits, ponds or lagoons with respect to waste treatment or disposal
No	Stained soil or pavement, patched pavement
No	Stressed vegetation (from causes other than insufficient water)
No	Fill dirt from unknown source, or contaminated source
No	Solid waste (mounds or depressions suggesting waste disposal)
No	Waste water / storm water discharged into a drain, ditch or stream
Yes	Wells (abandoned, irrigation, domestic, monitoring or oil and gas) - One water well was observed in the northern parcel.
No	Dry wells
No	Septic systems or cesspools
No	Movement of hazardous materials to adjacent properties
No	Hazardous substances and/or petroleum products
No	Above-ground storage tanks (ASTs) for storage of petroleum products and/or hazardous substances

<b>OBSERVED</b>	<b>CONDITION OBSERVED ON/AT SUBJECT PROPERTY</b>
No	Underground storage tanks (USTs) for storage of petroleum products and/or hazardous substances
No	Strong, pungent or noxious odors
No	Pools of liquid (other than water)
No	55-gallon drum or large sack storage
No	Unidentified substance containers
No	Stains and/or corrosion on floors, walls or ceiling (except water)
No	Drains and sumps
No	Oil-water separator/clarifier
No	Electrical or hydraulic equipment known to contain PCBs
No	Obvious signs of possible ACMs
No	Obvious signs of mold
No	Other areas of environmental concern

## **5.0. MATERIAL STORAGE**

No current or historic containers, storage vessels, and containment systems (e.g., clarifiers, oil/water separators, vaults, frac ponds, tanks, drums, storage lockers, silos) of 55 gallons or more for individual containers, or 100 gallons in aggregate for smaller containers, were observed on the subject property or have been historically utilized on the property.

## **6.0. INTERVIEWS**

AGE forwarded an ASTM -compliant questionnaire to the property owner for completion, however the completed questionnaire has not been received as of the publication date of this Phase I report.

## **7.0. BUSINESS ENVIRONMENTAL RISKS - NON-ASTM SERVICES**

Additional environmental considerations beyond the scope of the standard ASTM practice that have the potential to pose business environmental risks are discussed below.

### **7.1. MOLD**

Molds are part of the natural environment. Outdoors, molds play a part in nature by breaking down dead organic matter such as fallen leaves and dead trees, but indoors, mold growth should be avoided. Molds reproduce by means of tiny spores; the spores are invisible to the naked eye and float through outdoor and indoor air. Mold may begin growing indoors when mold spores land on surfaces that are wet. There are many types of mold, and none of them will grow without water or moisture.

Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. Molds have the potential to cause health problems. Molds produce allergens (substances that can cause allergic reactions), irritants, and in some cases, potentially toxic substances (mycotoxins).

At the time of the property reconnaissance, no obvious signs of mold/microbiological growth, were observed.

## 7.2. ASBESTOS CONTAINING BUILDING MATERIALS

Asbestos is a mineral fiber that has been used commonly in a variety of building construction materials for insulation and as a fire-retardant. Because of its fiber strength and heat resistant properties, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings.

Prior to the late 1970s, building products and insulation materials commonly contained asbestos. In 1989, the USEPA banned all new uses of asbestos; however, uses developed before 1989 are still allowed. When asbestos-containing materials are damaged or disturbed by repair, remodeling or demolition activities, microscopic fibers become airborne and can be inhaled into the lungs, where they can cause significant health problems.

No structures are located on the property except for a small shed. No evidence of ACM was observed in the shed.

## 7.3. LEAD-BASED PAINT

Lead is a toxic metal that was used for many years in products found in and around our homes. Lead-based paint (LBP) was used extensively in buildings constructed before 1950. In 1978, LBP was banned by the federal government. Lead may cause a range of health defects, from behavioral problems and learning disabilities, to seizures and death.

No structures are located on the property except for a small shed. No evidence of LBP was observed in the shed.

## 7.4. RADON

Radon is a naturally occurring, colorless, odorless gas that is soluble in water. It is produced through the radioactive decay of uranium and radium, which is naturally present in soil and in minerals in bedrock. Radon is radioactive, which means that it breaks down or decays to form other elements. Radon concentrations generally differ among different rock types and can vary considerably within the same geologic formation. Radon moves from its source in rocks and soils through voids and fractures. It can enter buildings as a gas through foundation cracks or it can dissolve in ground water and be carried to buildings through the use of water-supply wells. Buildings with basements and concrete slab foundations are more susceptible to elevated levels of indoor radon gas. The inhalation of radon gas can cause damage to lung tissue.

A common unit of radioactivity measurement is picocuries per liter (pCi/L). The USEPA established the recommended safe radon level at 4 pCi/L. According to the USEPA, the subject property county, Contra Costa, is located in a moderate radon potential area (Zone 2), defined as having a 'predicted average indoor radon screening level between 2 and 4 pCi/L.'

## 7.5. WETLANDS

As reported in Section 3.2., according to the EDR Report (Appendix C) the subject property is not located within a National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR from the U.S. Fish and Wildlife Service.

## 7.6. REGULATORY COMPLIANCE

AGI searched the subject property address, Mitchell Canyon Road, Clayton, California, on local, state and federal databases. No records were found regarding any outstanding regulatory permitting or requirements/directives in connection with the property.

## 8.0. EVALUATION

Any deviations from the ASTM Standard Practice 1527E-13 and USEPA AAI are presented below, along with the findings, conclusions, and opinions identified during the course of this Phase I.

### 8.1. DATA GAPS AND LIMITATIONS

A data gap occurs when a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance, and interviews. The following data gaps and/or limitations were identified during the course of this Phase I, which may deviate from the ASTM standard practice:

- The largest data gap in research was 27 years, between 1912 and 1939, with the earliest researched information being a Topographic Map dated in 1912. Data gaps generally do not exceed five years between 1940 through the present.
- An ASTM-compliant interview was not completed during this Phase I.

The lack of this information represents a data gap. However, based on the other information obtained during the completion of this assessment, the lack of the Interview does not represent a significant data gap.

### 8.2. FINDINGS

Based on the standards set by ASTM Practice E1527-13, the following findings are differentiated below as Business Environmental Risk (including the presence of asbestos-containing materials, lead-based paint, mold or moisture conditions, or non-hazardous regulated materials may constitute a Business Environmental Risk), de minimis conditions unlikely to be subject to government enforcement, HRECs, CRECs and RECs, as defined in Section 1.1. of this report.

#### 8.2.1. Business Environmental Risk

This assessment has revealed no evidence of potential Business Environmental Risks in connection with the subject property.

#### 8.2.2. De Minimis Conditions

This assessment revealed no evidence of potential or *de minimis* conditions in connection with the subject property.

### 8.2.3. Historical Recognized Environmental Conditions

This assessment has revealed no evidence of HRECs in connection with the subject property.

### 8.2.4. Controlled Recognized Environmental Conditions

This assessment has revealed no evidence of CRECs in connection with the subject property.

### 8.2.5. Recognized Environmental Conditions

This assessment has revealed no evidence of RECs in connection with the subject property.

## 9.0. CONCLUSIONS AND OPINION

AGI has performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527-13, US-EPA AAI for the property located at Mitchell Canyon Road, Clayton, California. Any exceptions to, or deletions from, this practice or scope of work are described in Section 8.1. of this report or presented as non-ASTM services in Section 7.0. It is the opinion of the environmental professionals that the findings and conclusions presented in this report are reasonable and prudent, given the evidence as presented. This assessment has revealed no evidence of RECs in connection with the property. AGI has no recommendations for additional environmental investigations of the subject property.

## 10.0. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We declare 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 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



---

Diane Becker  
Senior Geologist

## 11.0. QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Qualifications of the environmental professionals involved in the preparation of this Phase I are included in Appendix F.

## 12.0. REFERENCES

The following documents, maps or other publications may have been utilized during the preparation of this Phase I:

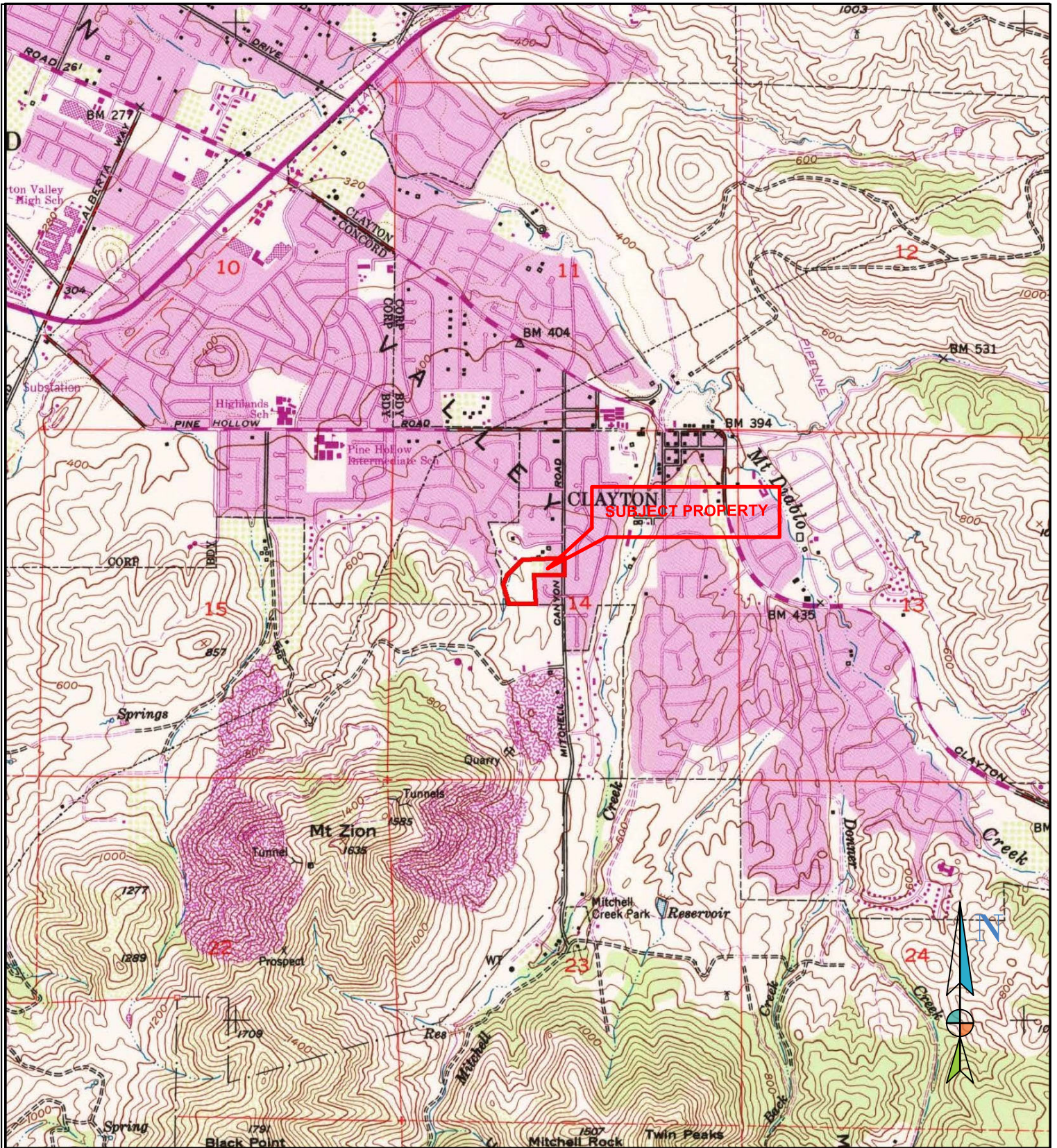
- AEI, *Phase I Environmental Assessment*, August 2019.
- -----, Limited Soil Sampling, September 2019.
- ASTM, E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2013.
- California Department of Water Resources (DWR), Groundwater Basins in California, Version 3.0., 2003.
- Environmental Data Resources Inc. (EDR)-prepared: The EDR Radius Map, The EDR-City Directory Abstract, Certified Sanborn® Map Report, EDR Historical Topographic Map Report, EDR Historical Aerial Photograph Report.

The following websites may have been accessed to obtain information during the preparation of this Phase I:

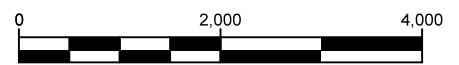
- California State Water Resource Control Board's GeoTracker website: <http://geotracker.swrcb.ca.gov/>
- California Geological Survey — Note 36: California Geomorphic Provinces: [http://www.conservation.ca.gov/cgs/information/publications/cgs\\_notes/note\\_36/Documents/note\\_36.pdf](http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/note_36/Documents/note_36.pdf)
- California Department of Water Resources website: <http://www.cd.water.ca.gov/>
- DTSC's ENVIROSTOR website: [www.envirostor.dtsc.ca.gov/public](http://www.envirostor.dtsc.ca.gov/public)
- DTSC's HWTS website: <http://www.hwts.dtsc.ca.gov/>
- FEMA's website: [www.fema.gov/](http://www.fema.gov/)
- ParcelQuest by CD-DATA online download: [www.parcelquest.com](http://www.parcelquest.com)
- USEPA's Envirofacts website: [www.epa.gov/enviro](http://www.epa.gov/enviro)
- USEPA's radon information website: [www.epa.gov/radon/zonemap.html#mapcolors](http://www.epa.gov/radon/zonemap.html#mapcolors)
- USEPA's lead information website: [www.epa.gov/lead/](http://www.epa.gov/lead/)
- USEPA's asbestos information website: [www.epa.gov/asbestos/](http://www.epa.gov/asbestos/)
- USEPA's mold information website: [www.epa.gov/mold/moldguide.html](http://www.epa.gov/mold/moldguide.html)
- The Geologic Energy Management Division (CalGEM) Well Finder: <https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx>



# Figures



CLAYTON, CALIFORNIA  
 7.5 MINUTE SERIES (U.S. GEOLOGICAL SURVEY)



APPROXIMATE SCALE IN FEET

**AdvancedGeo**  
 An Employee-Owned Company



www.advancedgeo.biz  
 (800) 511-9300

**LOCATION MAP**  
 CLAYTON TRUST PROPERTY  
 APNs 121-090-011-2 and 121-090-016-1  
 CLAYTON, CALIFORNIA

DATE: FEBRUARY 2020

FILE: LOCATION



DRAWN BY: DMB

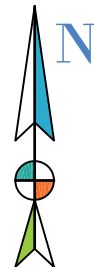
PROJECT NO. 20-4996

FIGURE: 1



## LEGEND

-  Approximate Property Boundary
-  Approximate Water Well Location



\*Base map from Google Earth

**AdvancedGeo**

*An Employee-Owned Company*



www.advancedgeo.biz  
(800) 511-9300

## SITE PLAN

CLAYTON TRUST PROPERTY  
APNs 121-090-011-2 and 121-090-016-1  
CLAYTON, CALIFORNIA

DATE: FEBRUARY 2020

FILE: SP

DRAWN BY: DMB

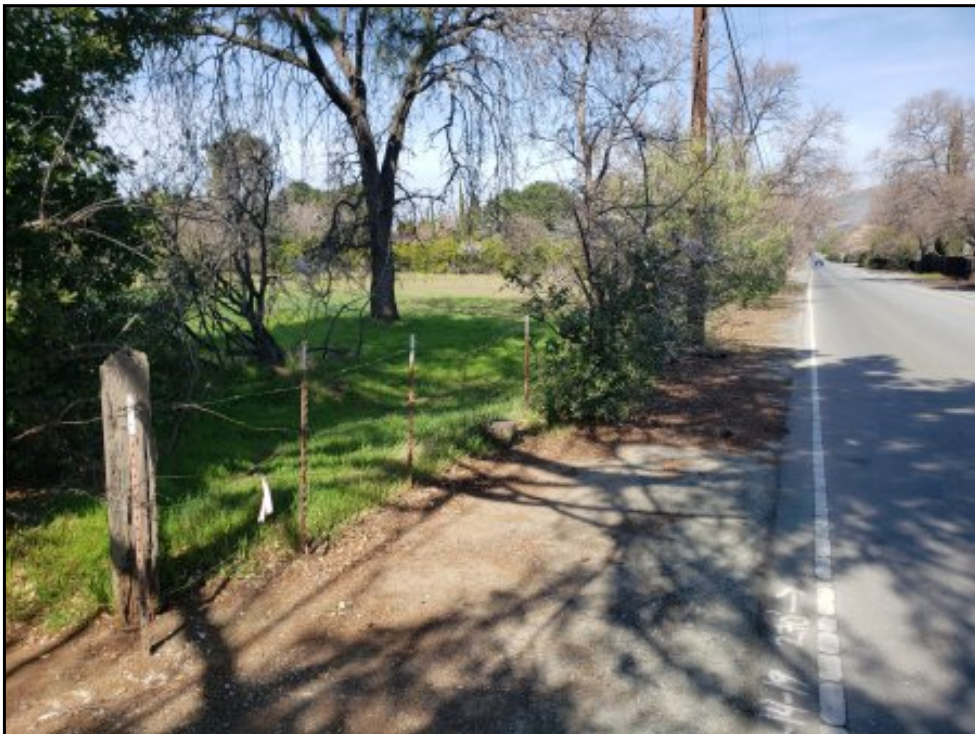
PROJECT NO. 20-4996

FIGURE: 2

**Appendix A -  
Photographs of the Subject Property**



1 : View of northeast corner of subject property along Mitchell Canyon Road. Photograph depicts eastern property boundary and right-of-way shoulder on west side of Mitchell Canyon Road.



2 : View of southeast corner of subject property along Mitchell Canyon Road. Photograph depicts eastern property boundary and right-of-way shoulder on west side of Mitchell Canyon Road.



3 : View from southern parcel looking towards the northeast. Background depicts tool shed and residential development.



4 : View from northeast corner of north parcel looking towards the northeast. Background depicts north property fenceline.



5 : View from Canyon Mitchell Road looking towards the west. Background depicts driveway entrance gate at northern parcel.



6 : View from northern parcel looking towards the northwest. Background depicts electrical transformer along the northern property boundary.



7 : View from northern parcel looking east towards Mitchell Canyon Road. Background depicts vegetation and undeveloped land.

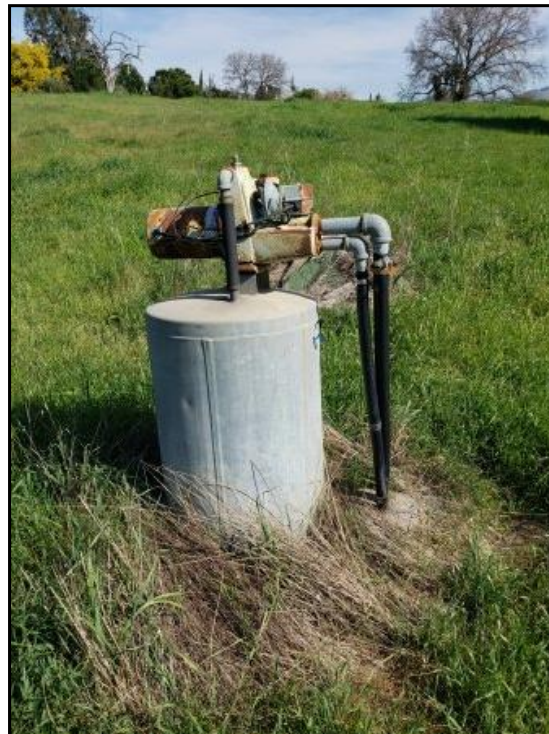


8 : View from northern parcel looking towards the west. Background depicts northwest corner of subject property and a residential development further northwest.





9 : View from northern parcel looking towards the west. Background depicts tool & equipment shed.



10 : View from northern parcel. Photograph depicts water well. At least one faucet was located at the tool shed.



11 : View from southern parcel looking towards the south. Background undeveloped land with trees and vegetation.



12 : View from southern parcel looking towards the west. Background depicts undeveloped land followed by a residential development.



13 : View from southern parcel looking towards the north. Background depicts undeveloped land followed by a residential development.



14 : View from southern parcel looking towards the southeast. Background depicts vegetation/trees and undeveloped land followed by residential development.

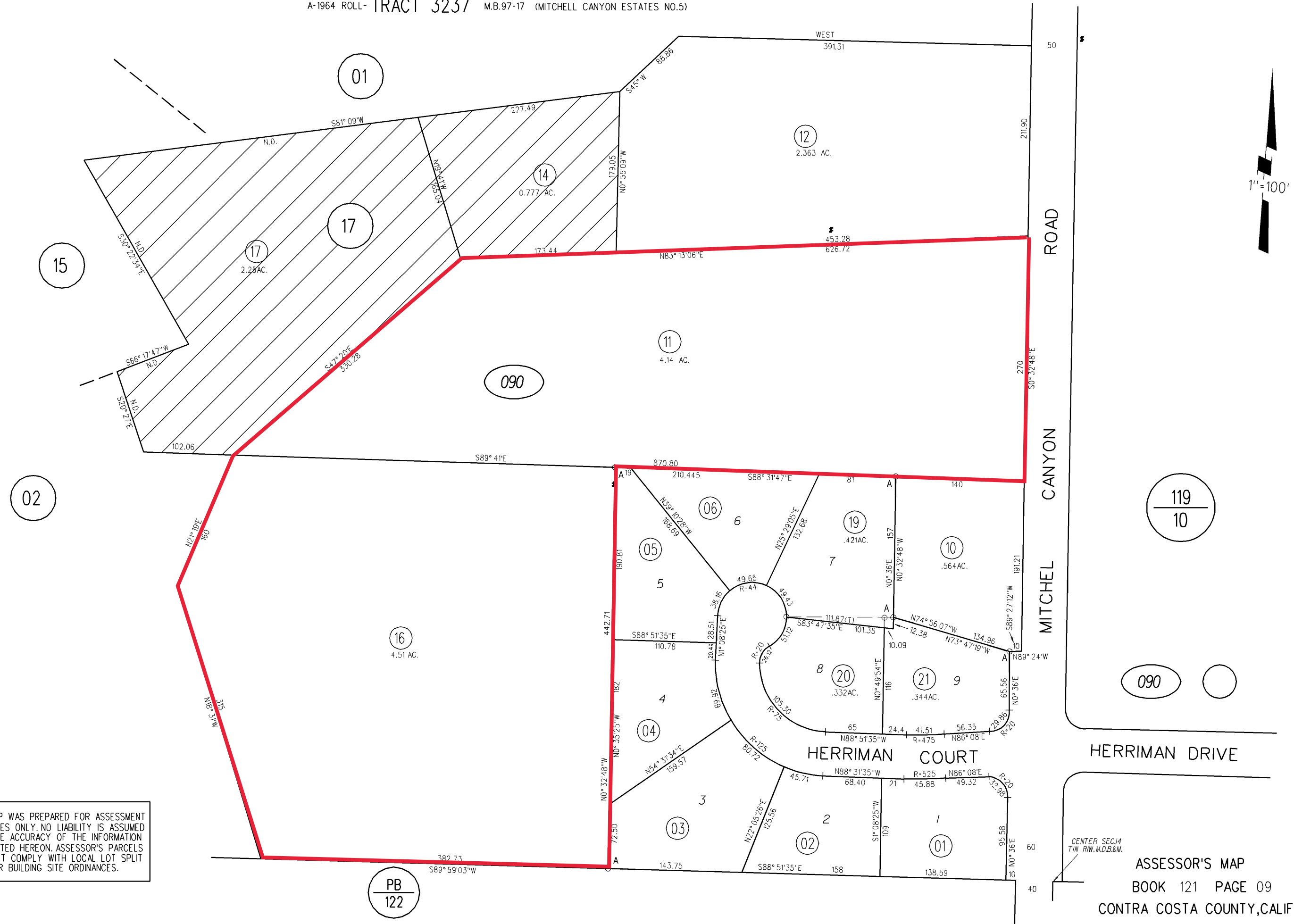


15 : View from southern parcel looking towards the northern parcel. Background depicts water well, followed by and residential development.

**Appendix B -  
Historical Documents**

POR. NW 1/4 SEC. 14, T1N R1W, M.D.B.&M.

A-1964 ROLL- TRACT 3237 M.B.97-17 (MITCHELL CANYON ESTATES NO.5)



NOTE: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE INFORMATION DELINEATED HEREON. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT SPLIT OR BUILDING SITE ORDINANCES.

CENTER SEC.14  
T1N R1W, M.D.B.&M.  
ASSESSOR'S MAP  
BOOK 121 PAGE 09  
CONTRA COSTA COUNTY, CALIF.



DETAIL REPORT

Property Address: MITCHELL CANYON RD CLAYTON CA 94517

Ownership

Parcel# (APN): 121-090-011-2  
 Parcel Status:  
 Owner Name: CLAYTON FRED B TRE ISOBE KAREN E  
 Mailing Addr: 825 ORANGE AVE SAN CARLOS CA 94070-3829  
 Legal Description: POR NW QR SEC 14 T1N R1W 4.14 AC

Assessment

Total Value:	\$91,579	Use Code:	62	Use Type:	MISCELLANEOUS
Land Value:	\$90,960	Tax Rate Area:	013-006	Zoning:	
Impr Value:	\$619	Year Assd:	2019	Census Tract:	
Other Value:		Property Tax:		Price/SqFt:	
% Improved:	0%	Delinquent Yr:			
Exempt Amt:		HO Exempt:	N		

Sale History

	Sale1	Sale2	Sale3	Transfer
Recording date:	09/05/2018	04/29/2017	07/07/2015	09/05/2018
Recording Doc:	141867		139567	141867
Doc type:				
Transfer Amount:				
Seller (Grantor):				

Property Characteristics

Bedrooms:	Fireplace:	Units:
Baths (Full):	A/C:	Stories:
Baths (Half):	Heating:	Quality:
Total Rooms:	Pool:	Building Class:
Bldg/Liv Area:	Park Type:	Condition:
Lot Acres: 4.140	Spaces:	Site influence:
Lot SqFt: 180,338	Garage SqFt:	Timber Preserve:
Year Built:	Bsmt SqFt: N/A	Ag Preserve:
Effective Year:		



DETAIL REPORT

Property Address: MITCHELL CANYON RD CLAYTON CA 94517

Ownership

Parcel# (APN): 121-090-016-1  
 Parcel Status:  
 Owner Name: CLAYTON FRED B TRE ISOBE KAREN E  
 Mailing Addr: 825 ORANGE AVE SAN CARLOS CA 94070-3829  
 Legal Description: POR NW QR SEC 14 T1N R1W 4.51 AC

Assessment

Total Value:	<b>\$41,274</b>	Use Code:	<b>18</b>	Use Type:	<b>VACANT</b>
Land Value:	<b>\$41,274</b>	Tax Rate Area:	<b>013-006</b>	Zoning:	
Impr Value:		Year Assd:	<b>2019</b>	Census Tract:	
Other Value:		Property Tax:		Price/SqFt:	
% Improved:	<b>0%</b>	Delinquent Yr:			
Exempt Amt:		HO Exempt:	<b>N</b>		


Sale History

	Sale1	Sale2	Sale3	Transfer
Recording date:	<b>09/05/2018</b>	<b>04/29/2017</b>	<b>07/07/2015</b>	<b>09/05/2018</b>
Recording Doc:	<b>141867</b>		<b>139567</b>	<b>141867</b>
Doc type:				
Transfer Amount:				
Seller (Grantor):				

Property Characteristics

Bedrooms:	Fireplace:	Units:
Baths (Full):	A/C:	Stories:
Baths (Half):	Heating:	Quality:
Total Rooms:	Pool:	Building Class:
Bldg/Liv Area:	Park Type:	Condition:
Lot Acres: <b>4.510</b>	Spaces:	Site influence:
Lot SqFt: <b>196,456</b>	Garage SqFt:	Timber Preserve:
Year Built:	Bsmt SqFt: <b>N/A</b>	Ag Preserve:
Effective Year:		





Clayton Trust Property  
Mitchell Canyon Road  
Clayton, CA 94517

Inquiry Number: 5957509.3

February 03, 2020

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

02/03/20

**Site Name:**

Clayton Trust Property  
Mitchell Canyon Road  
Clayton, CA 94517  
EDR Inquiry # 5957509.3

**Client Name:**

AdvancedGeo, Inc.  
837 Shaw Road  
Stockton, CA 92515  
Contact: Diane Becker



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by AdvancedGeo, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** D1FD-4374-A73B  
**PO #** NA  
**Project** Clayton Trust Property

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: D1FD-4374-A73B

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

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

*The Sanborn Library LLC Since 1866™*

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**Clayton Trust Property**

Mitchell Canyon Road

Clayton, CA 94517

Inquiry Number: 5957509.8

February 03, 2020

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

02/03/20

**Site Name:**

Clayton Trust Property  
Mitchell Canyon Road  
Clayton, CA 94517  
EDR Inquiry # 5957509.8

**Client Name:**

AdvancedGeo, Inc.  
837 Shaw Road  
Stockton, CA 92515  
Contact: Diane Becker



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

## Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Flight Date: August 27, 1998	USDA
1993	1"=500'	Acquisition Date: June 12, 1993	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1979	1"=500'	Flight Date: August 16, 1979	USDA
1966	1"=500'	Flight Date: May 15, 1966	USDA
1963	1"=500'	Flight Date: July 16, 1963	EDR Proprietary Aerial Viewpoint
1958	1"=500'	Flight Date: August 13, 1958	USDA
1950	1"=500'	Flight Date: March 12, 1950	USDA
1949	1"=500'	Flight Date: October 13, 1949	USGS
1946	1"=500'	Flight Date: July 22, 1946	USGS
1939	1"=500'	Flight Date: July 25, 1939	USDA

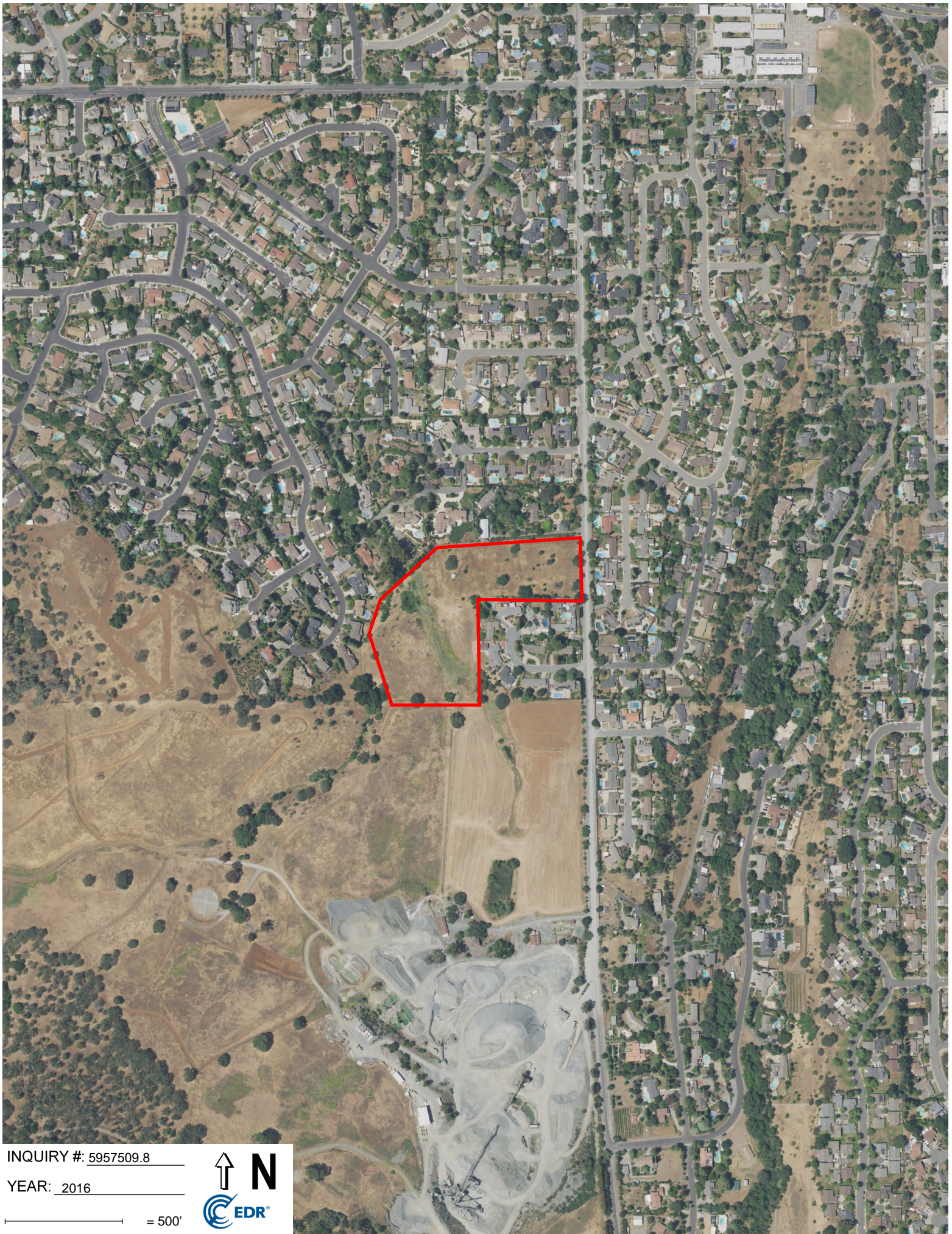
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INQUIRY #: 5957509.8

YEAR: 2016

— = 500'







INQUIRY #: 5957509.8

YEAR: 2009

— = 500'





INQUIRY #: 5957509.8

YEAR: 2006

— = 500'







INQUIRY #: 5957509.8

YEAR: 1998

 = 500'





INQUIRY #: 5957509.8

YEAR: 1993

 = 500'





INQUIRY #: 5957509.8

YEAR: 1982

— = 500'





INQUIRY #: 5957509.8

YEAR: 1979

— = 500'





INQUIRY #: 5957509.8

YEAR: 1966

— = 500'



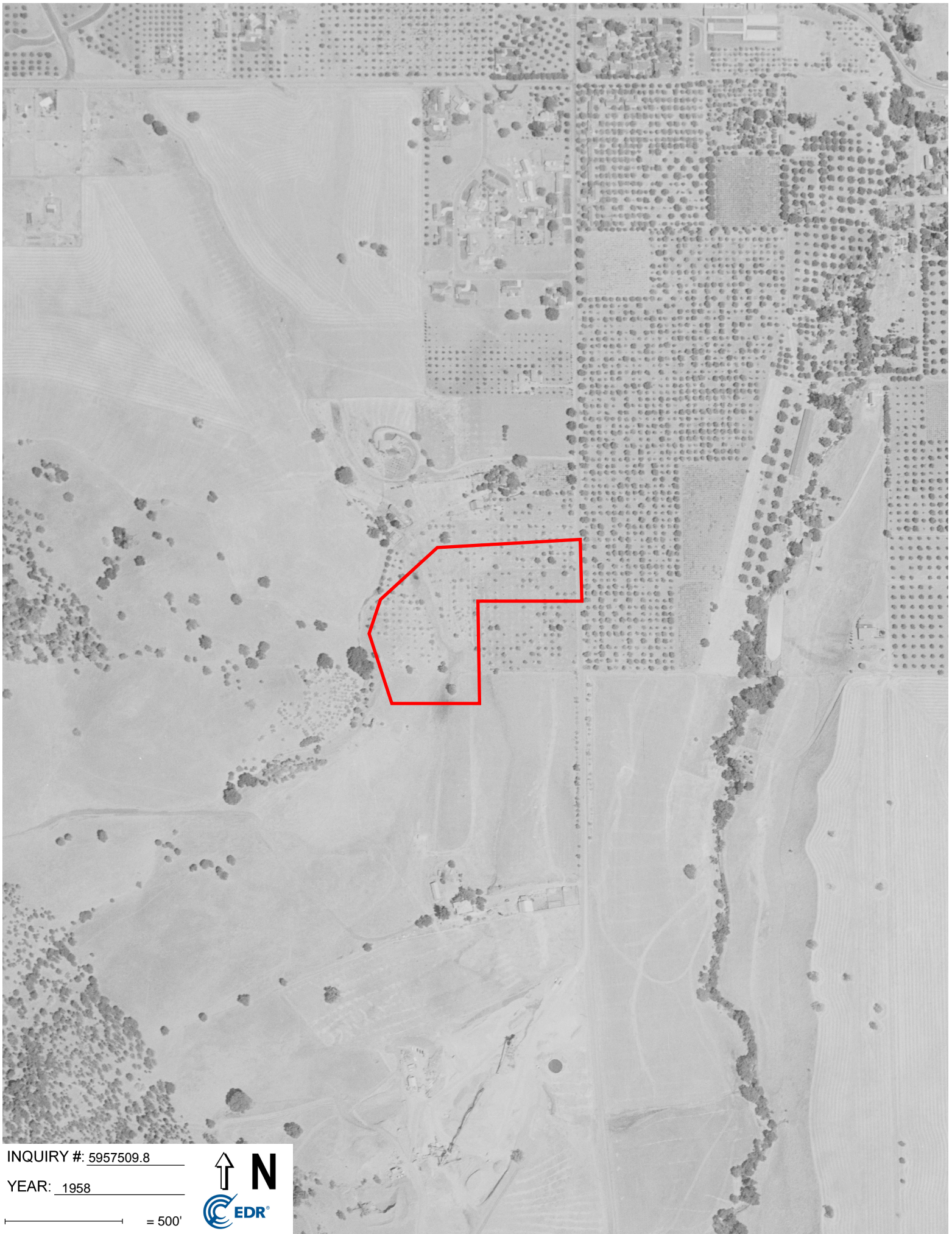


INQUIRY #: 5957509.8

YEAR: 1963

— = 500'





INQUIRY #: 5957509.8

YEAR: 1958

— = 500'





INQUIRY #: 5957509.8

YEAR: 1950

— = 500'







INQUIRY #: 5957509.8

YEAR: 1949

— = 500'



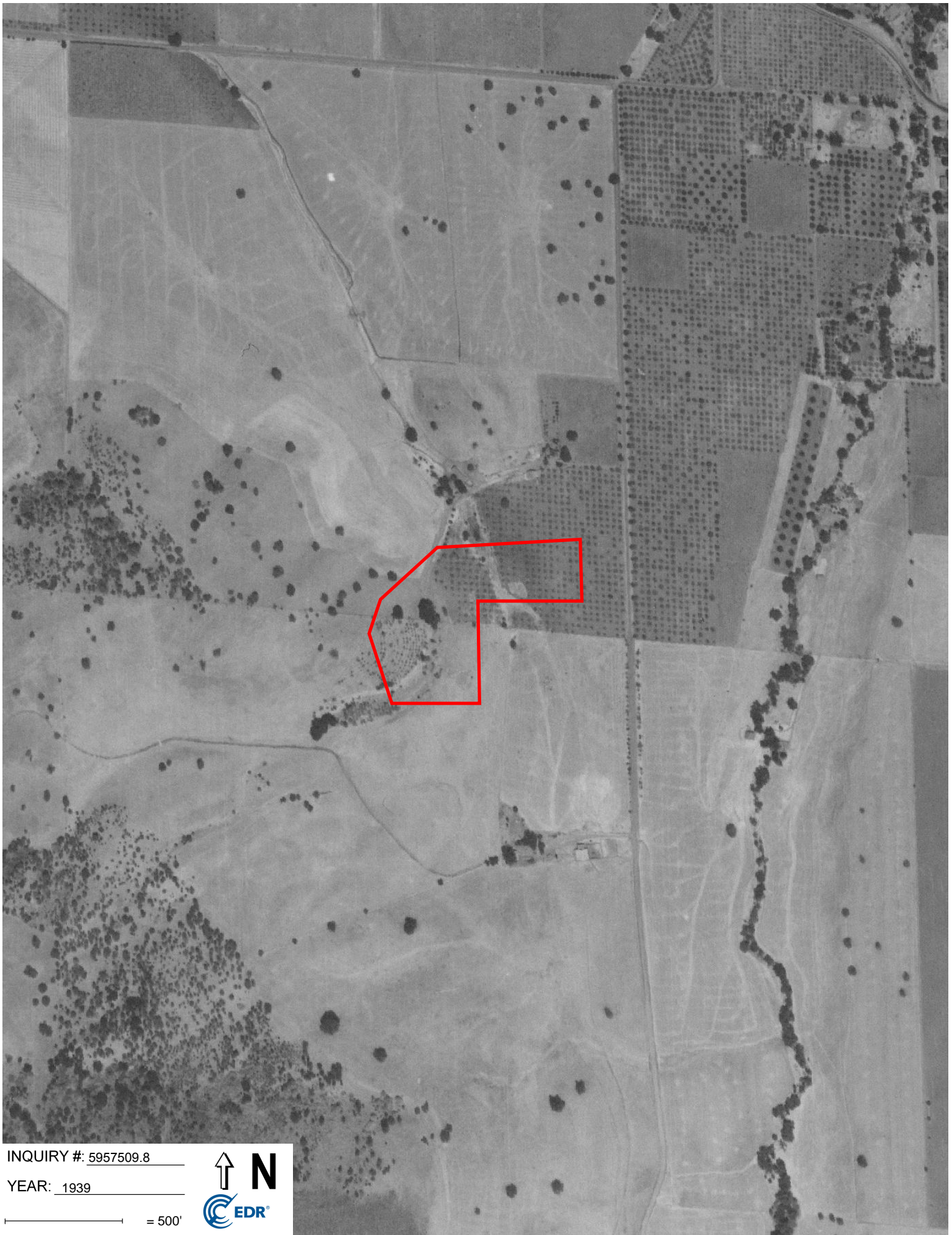


INQUIRY #: 5957509.8

YEAR: 1946

— = 500'





INQUIRY #: 5957509.8

YEAR: 1939

— = 500'



Clayton Trust Property  
Mitchell Canyon Road  
Clayton, CA 94517

Inquiry Number: 5957509.4

February 03, 2020

# EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Historical Topo Map Report

02/03/20

**Site Name:**

Clayton Trust Property  
Mitchell Canyon Road  
Clayton, CA 94517  
EDR Inquiry # 5957509.4

**Client Name:**

AdvancedGeo, Inc.  
837 Shaw Road  
Stockton, CA 92515  
Contact: Diane Becker



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by AdvancedGeo, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:**

**Coordinates:**

<b>P.O.#</b>	NA	<b>Latitude:</b>	37.935244 37° 56' 7" North
<b>Project:</b>	Clayton Trust Property	<b>Longitude:</b>	-121.94392 -121° 56' 38" West
		<b>UTM Zone:</b>	Zone 10 North
		<b>UTM X Meters:</b>	592803.77
		<b>UTM Y Meters:</b>	4199156.08
		<b>Elevation:</b>	495.66' above sea level

**Maps Provided:**

2012	1898
1994	1896
1980	
1973	
1968	
1953	
1943	
1912	

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## **Topo Sheet Key**

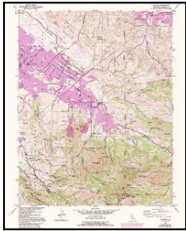
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **2012 Source Sheets**



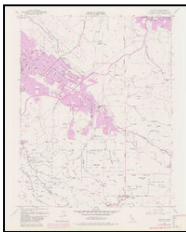
Clayton  
2012  
7.5-minute, 24000

### **1994 Source Sheets**



Clayton  
1994  
7.5-minute, 24000  
Aerial Photo Revised 1979

### **1980 Source Sheets**



Clayton  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1979

### **1973 Source Sheets**

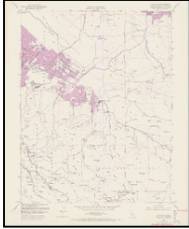


Clayton  
1973  
7.5-minute, 24000  
Aerial Photo Revised 1973

## **Topo Sheet Key**

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **1968 Source Sheets**



Clayton  
1968  
7.5-minute, 24000  
Aerial Photo Revised 1968

### **1953 Source Sheets**



Clayton  
1953  
7.5-minute, 24000  
Aerial Photo Revised 1949

### **1943 Source Sheets**



Mt. Diablo  
1943  
15-minute, 62500  
Aerial Photo Revised 1937

## ***Topo Sheet Key***

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **1898 Source Sheets**



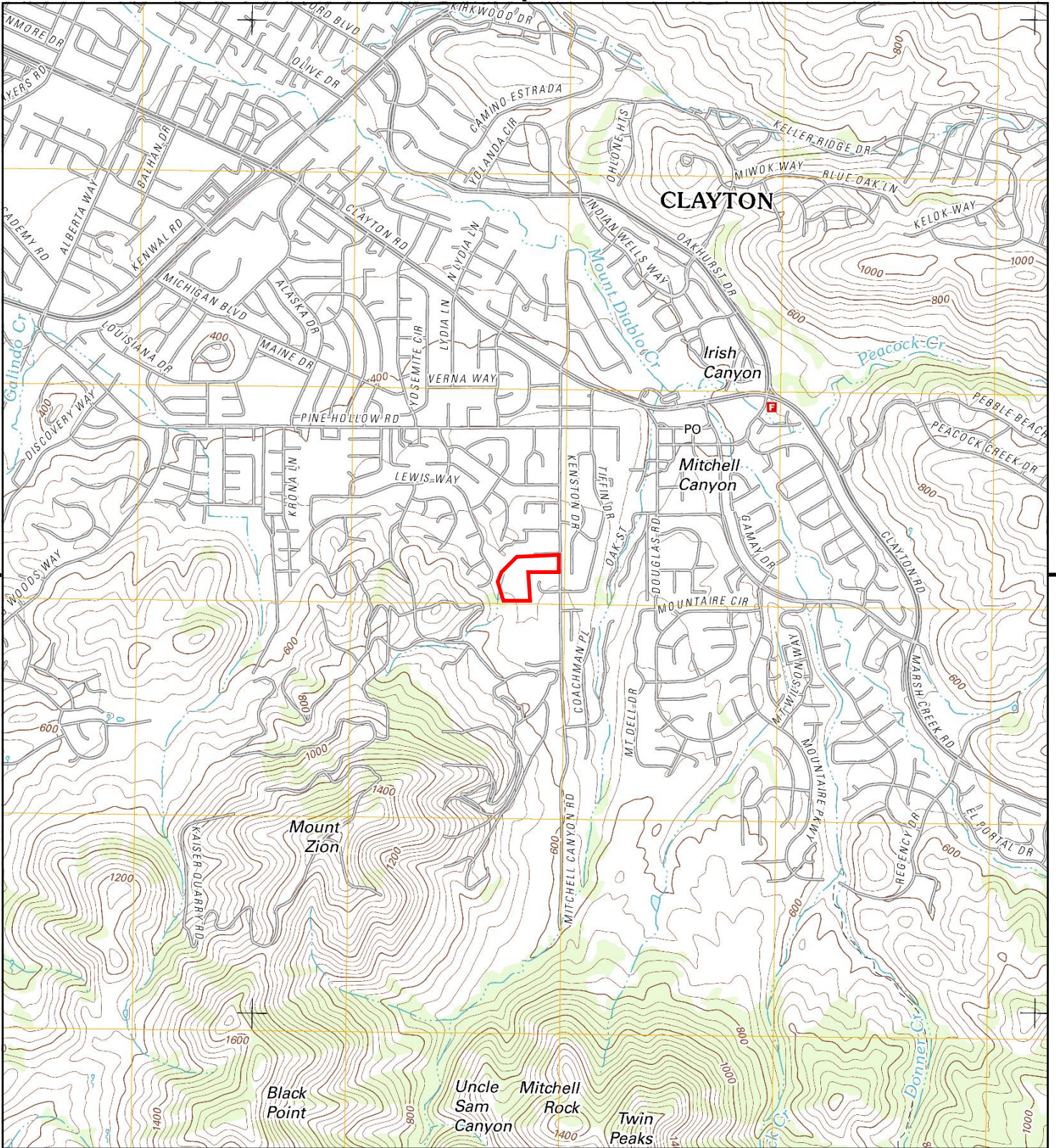
Mt. Diablo  
1898  
15-minute, 62500

### **1896 Source Sheets**

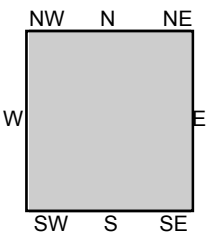
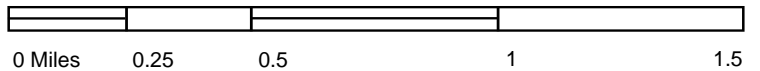


Mt. Diablo  
1896  
15-minute, 62500





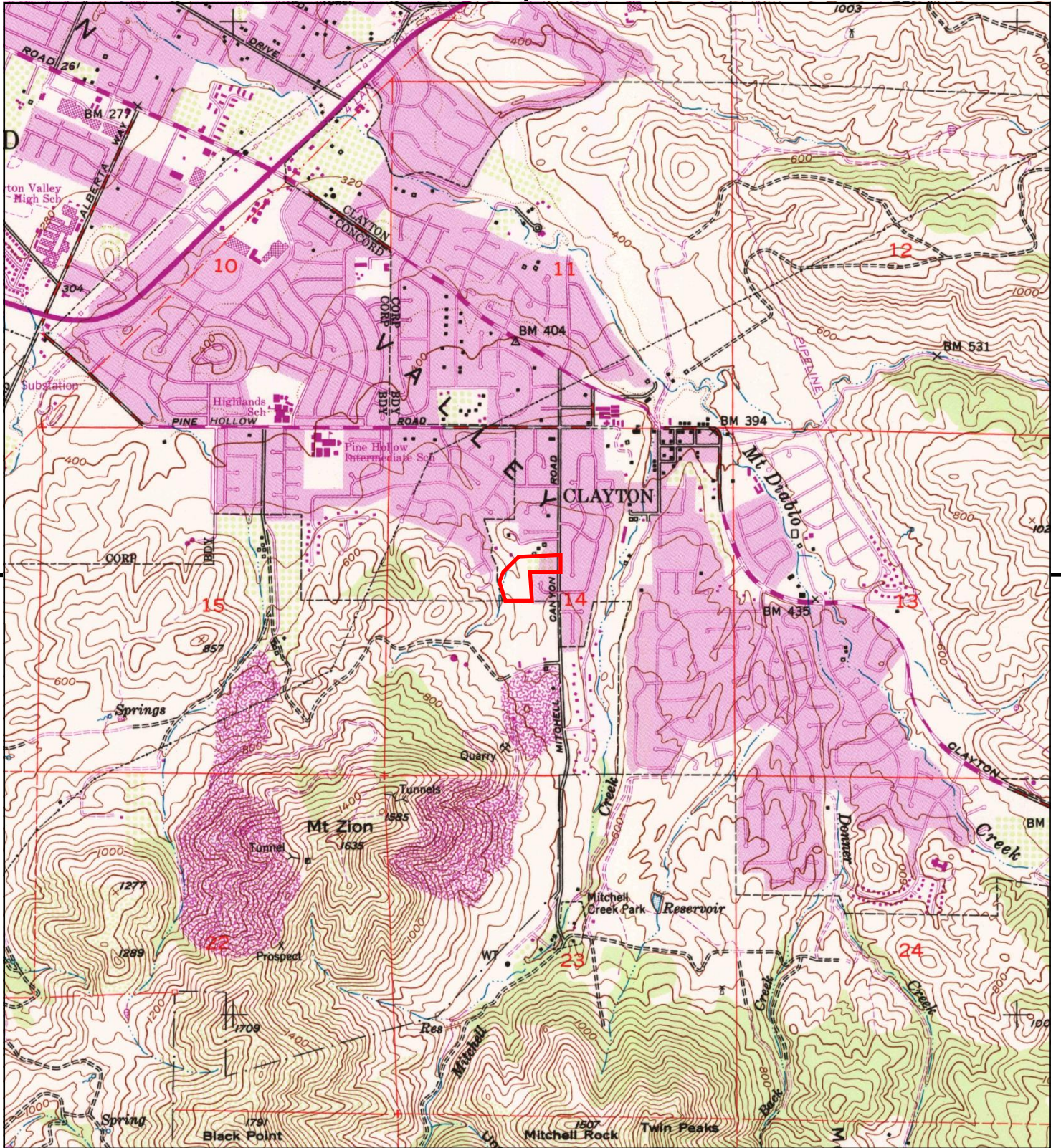
This report includes information from the following map sheet(s).



TP, Clayton, 2012, 7.5-minute

**SITE NAME:** Clayton Trust Property  
**ADDRESS:** Mitchell Canyon Road  
 Clayton, CA 94517  
**CLIENT:** AdvancedGeo, Inc.





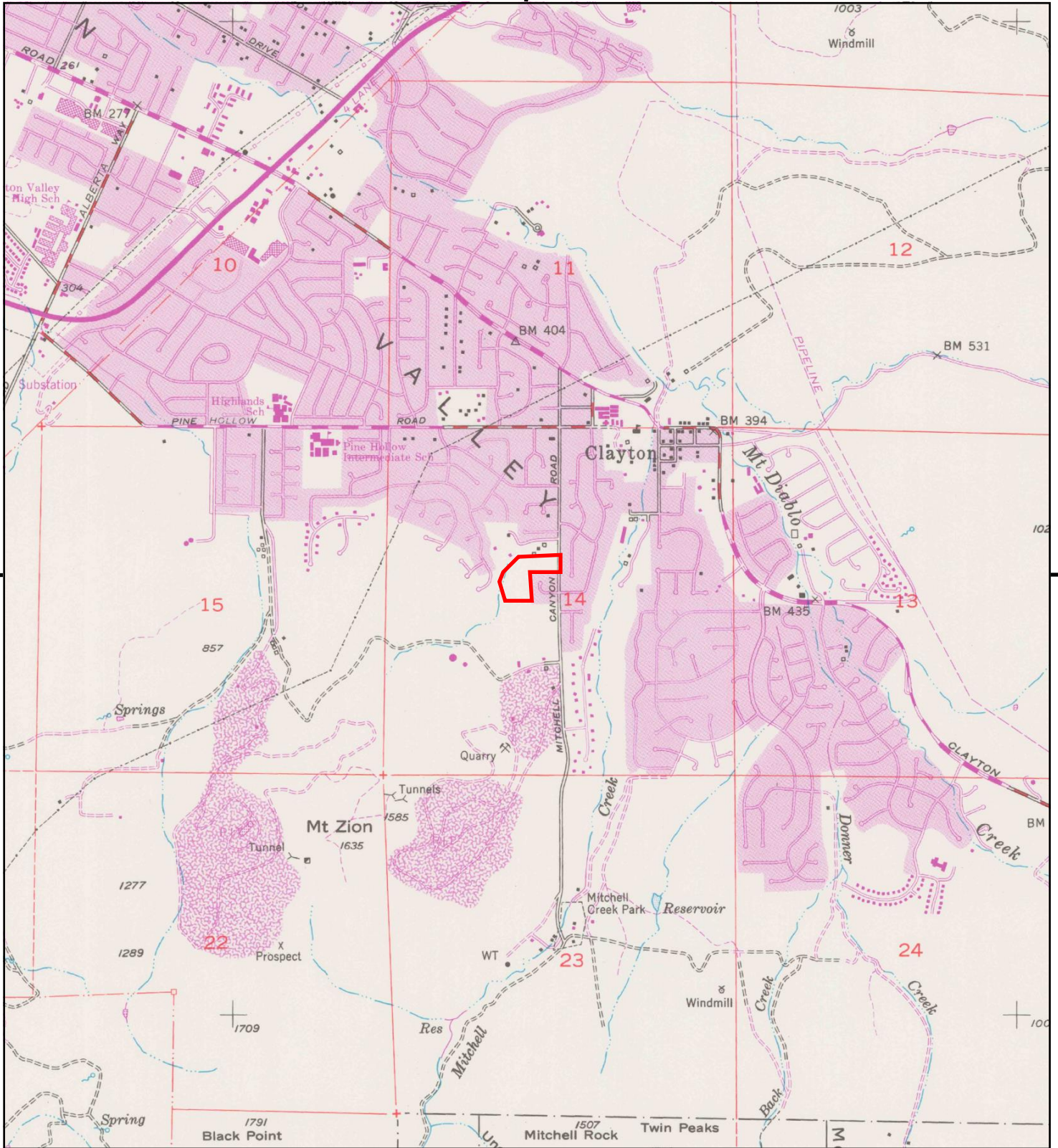
This report includes information from the following map sheet(s).



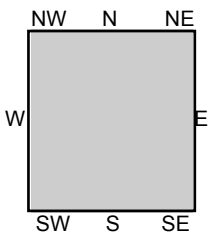
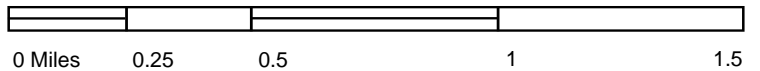
TP, Clayton, 1994, 7.5-minute

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton, CA 94517  
 CLIENT: AdvancedGeo, Inc.





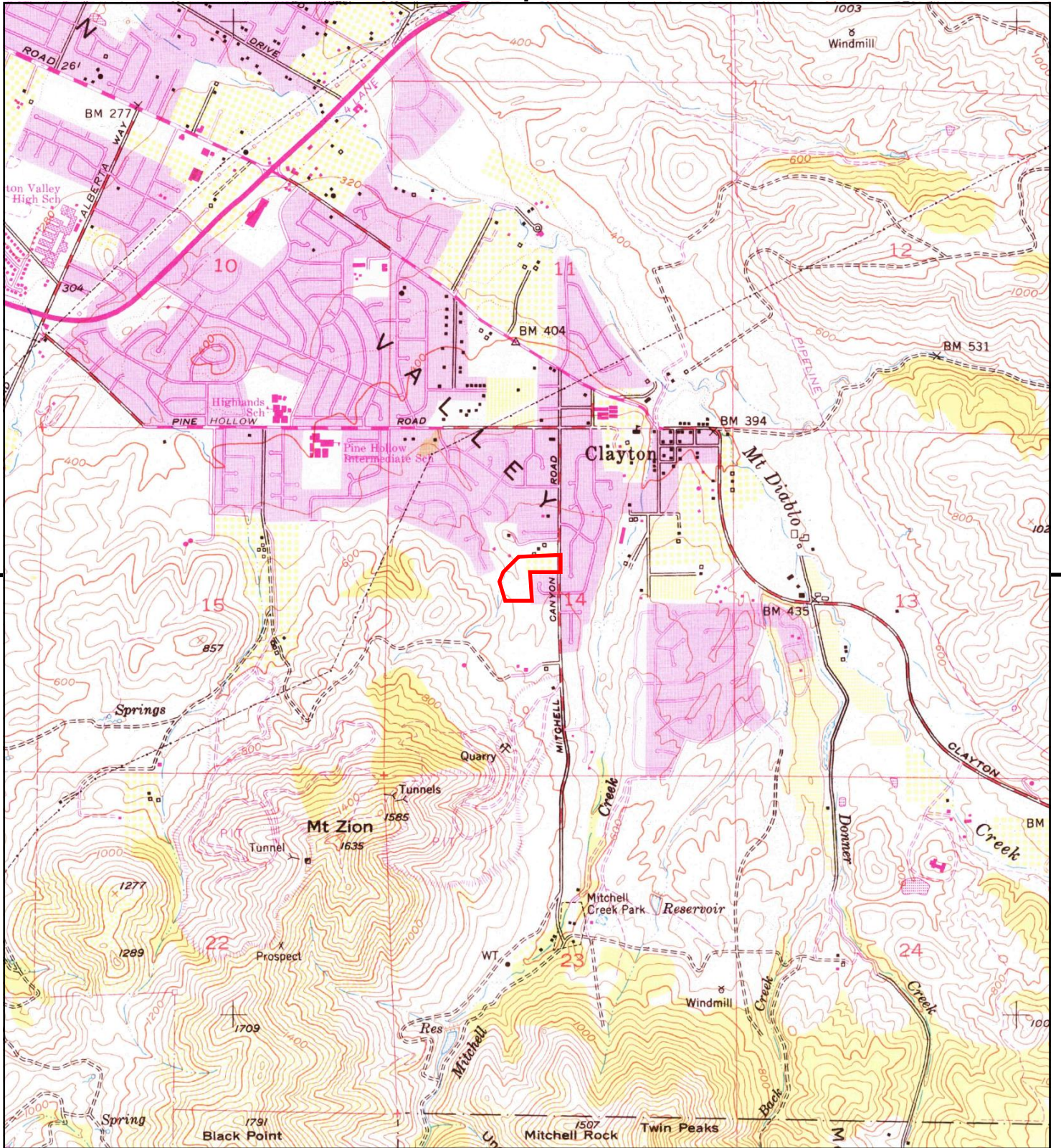
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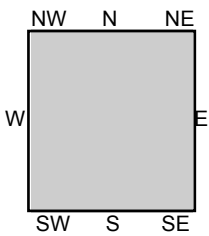
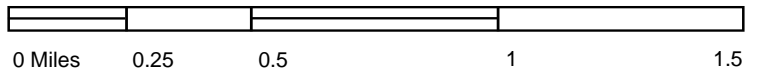
TP, Clayton, 1980, 7.5-minute

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton, CA 94517  
 CLIENT: AdvancedGeo, Inc.





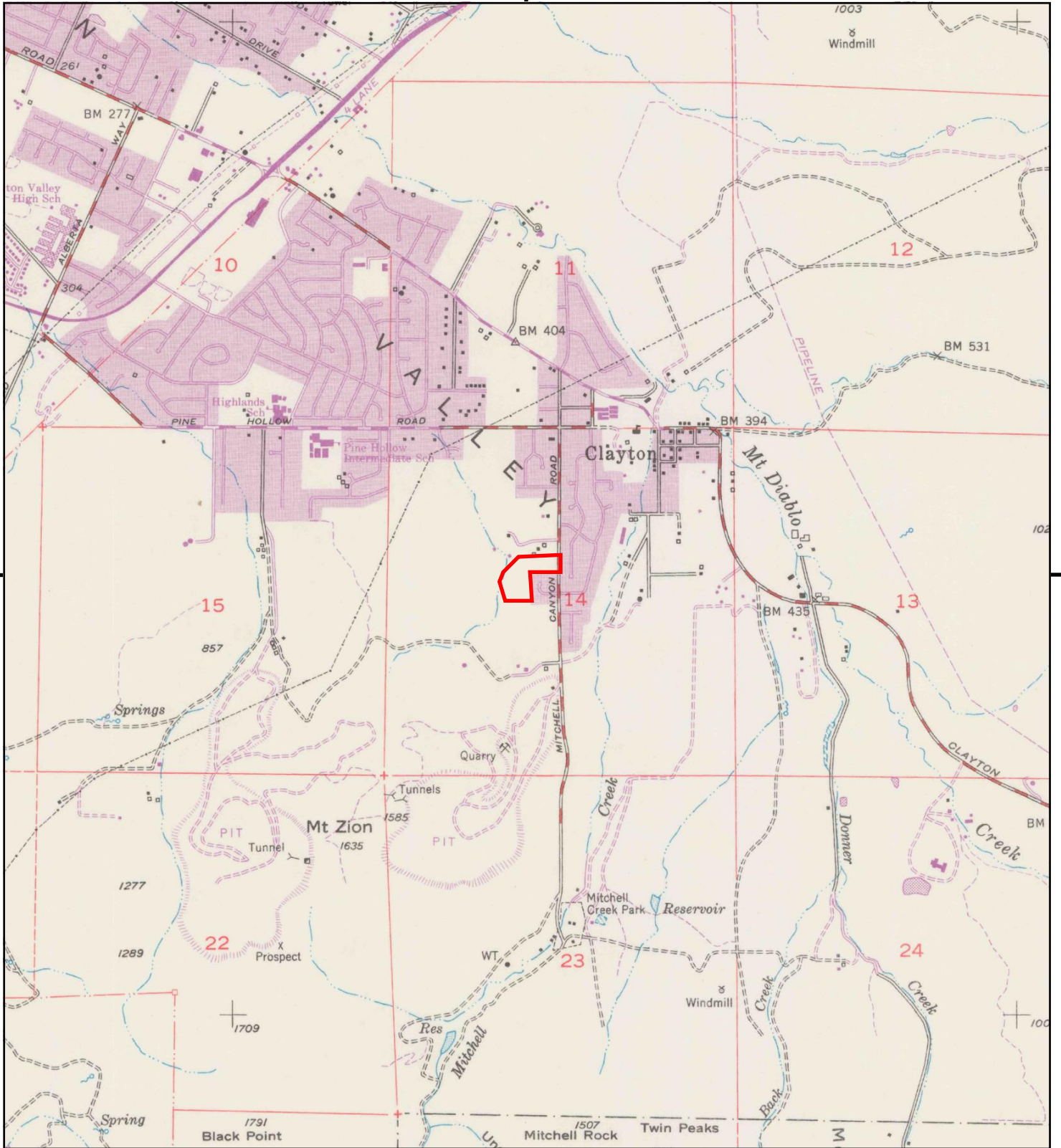
This report includes information from the following map sheet(s).



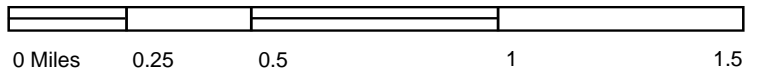
TP, Clayton, 1973, 7.5-minute

**SITE NAME:** Clayton Trust Property  
**ADDRESS:** Mitchell Canyon Road  
 Clayton, CA 94517  
**CLIENT:** AdvancedGeo, Inc.





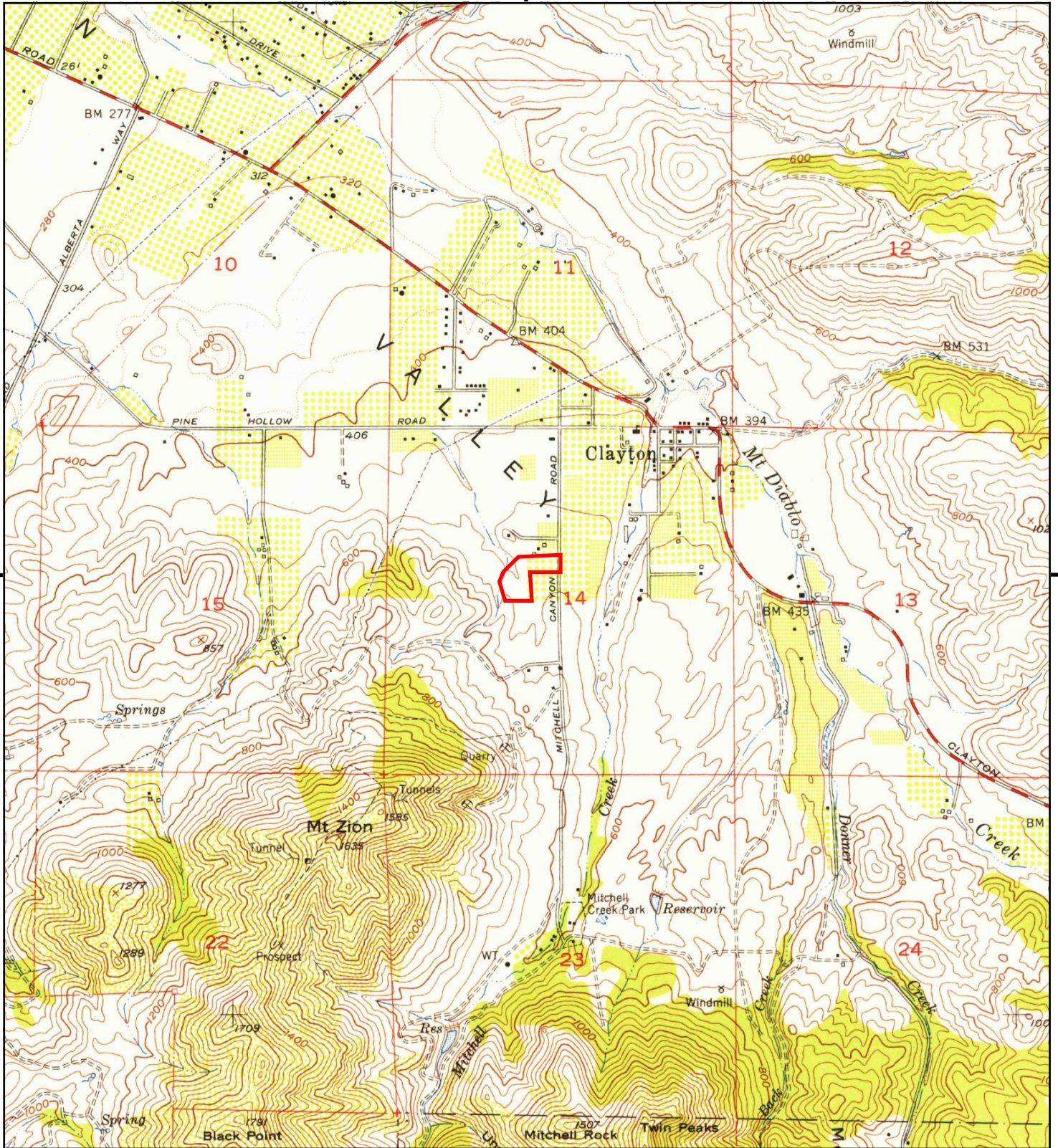
This report includes information from the following map sheet(s).



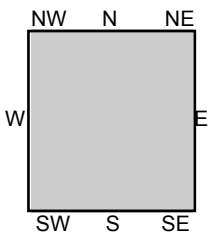
TP, Clayton, 1968, 7.5-minute

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton, CA 94517  
 CLIENT: AdvancedGeo, Inc.





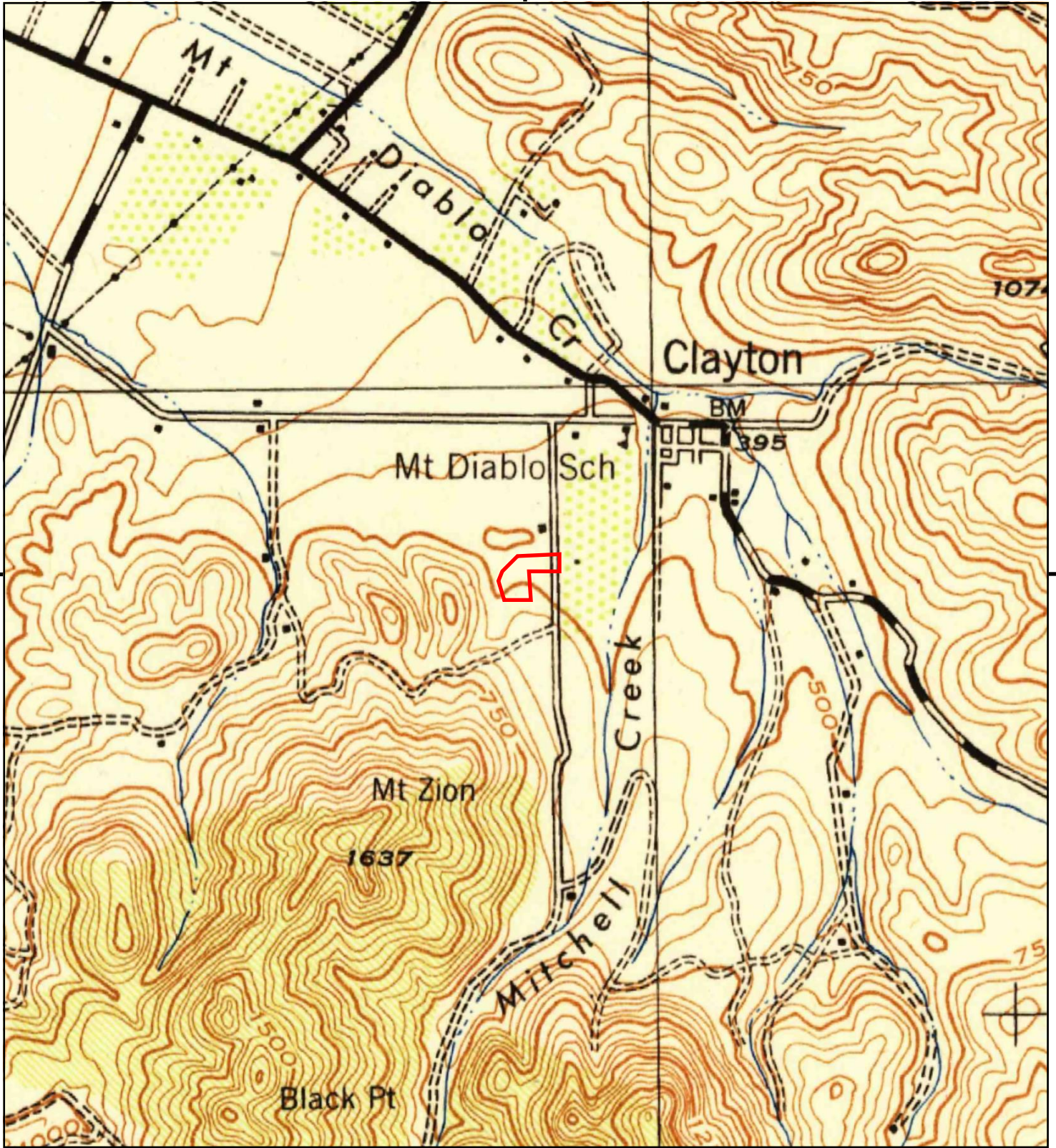
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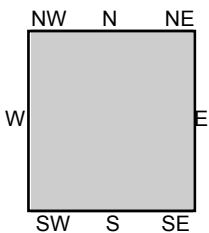
TP, Clayton, 1953, 7.5-minute

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton, CA 94517  
 CLIENT: AdvancedGeo, Inc.





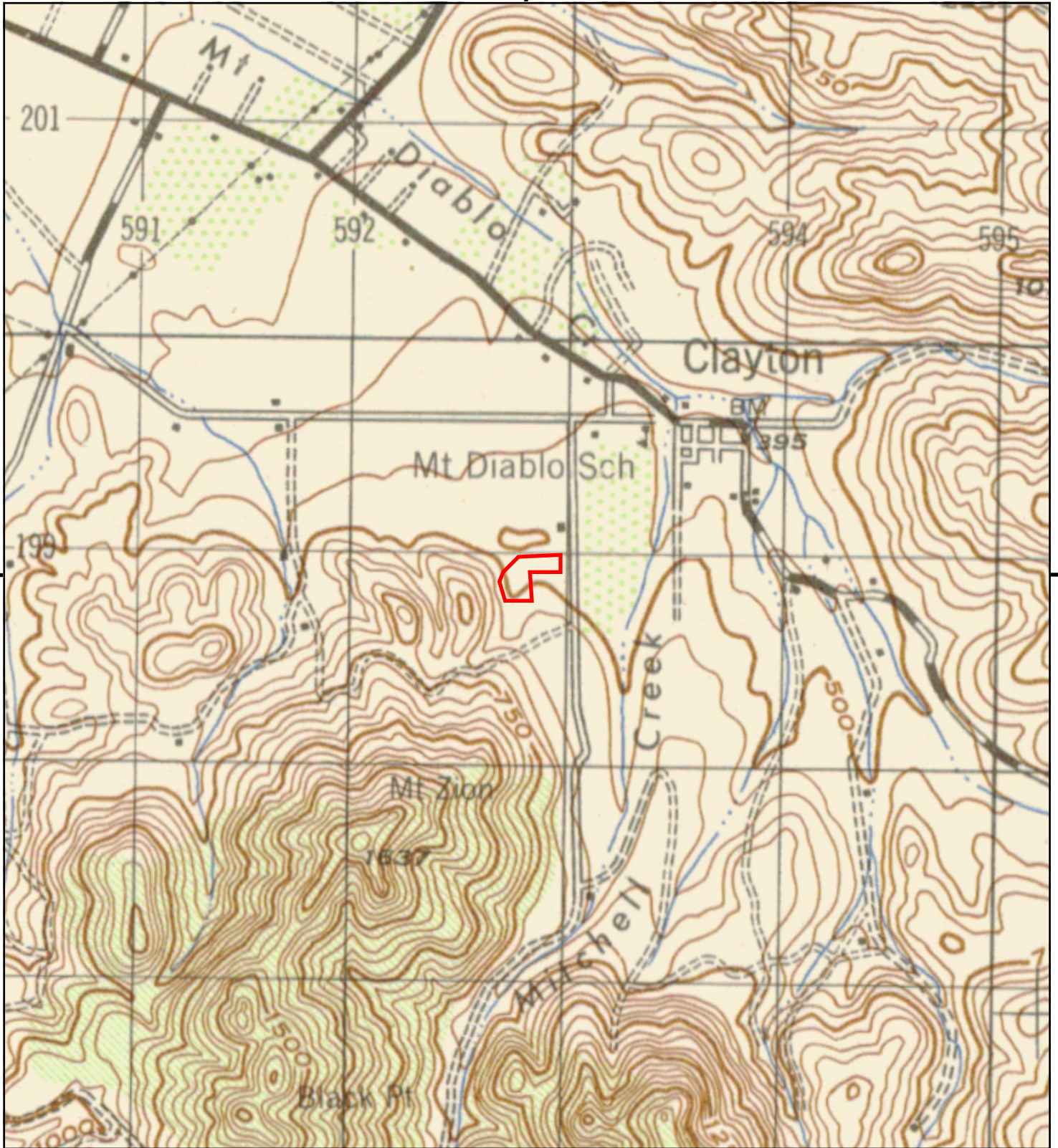
This report includes information from the following map sheet(s).



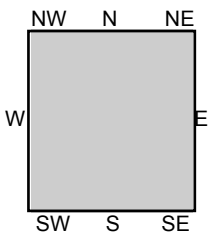
TP, Mt. Diablo, 1943, 15-minute

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton, CA 94517  
 CLIENT: AdvancedGeo, Inc.





This report includes information from the following map sheet(s).

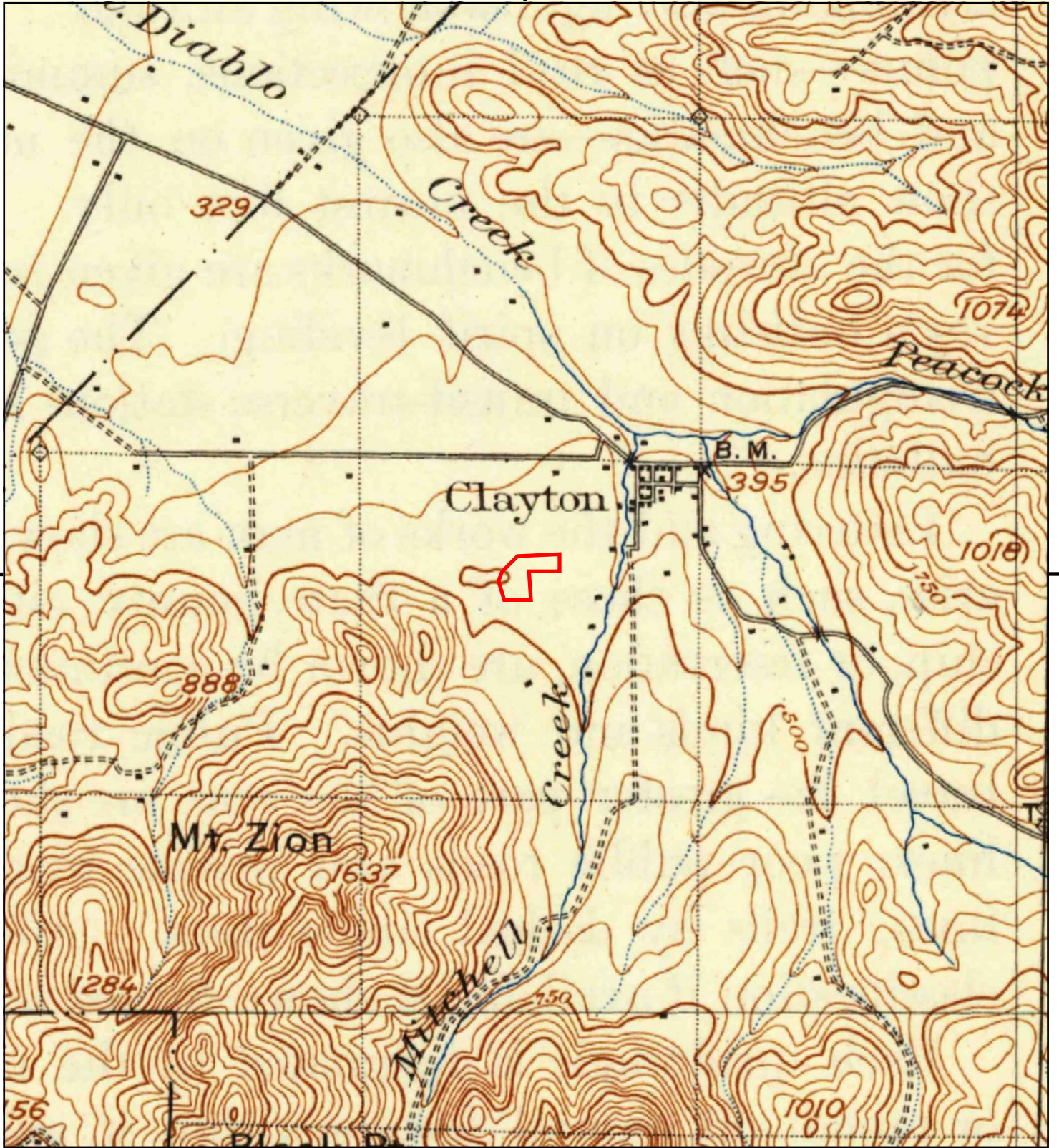


TP, MT. DIABLO, 1912, 15-minute

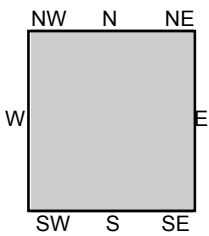
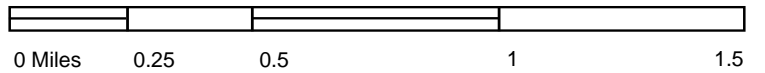
SITE NAME: Clayton Trust Property  
ADDRESS: Mitchell Canyon Road  
Clayton, CA 94517  
CLIENT: AdvancedGeo, Inc.







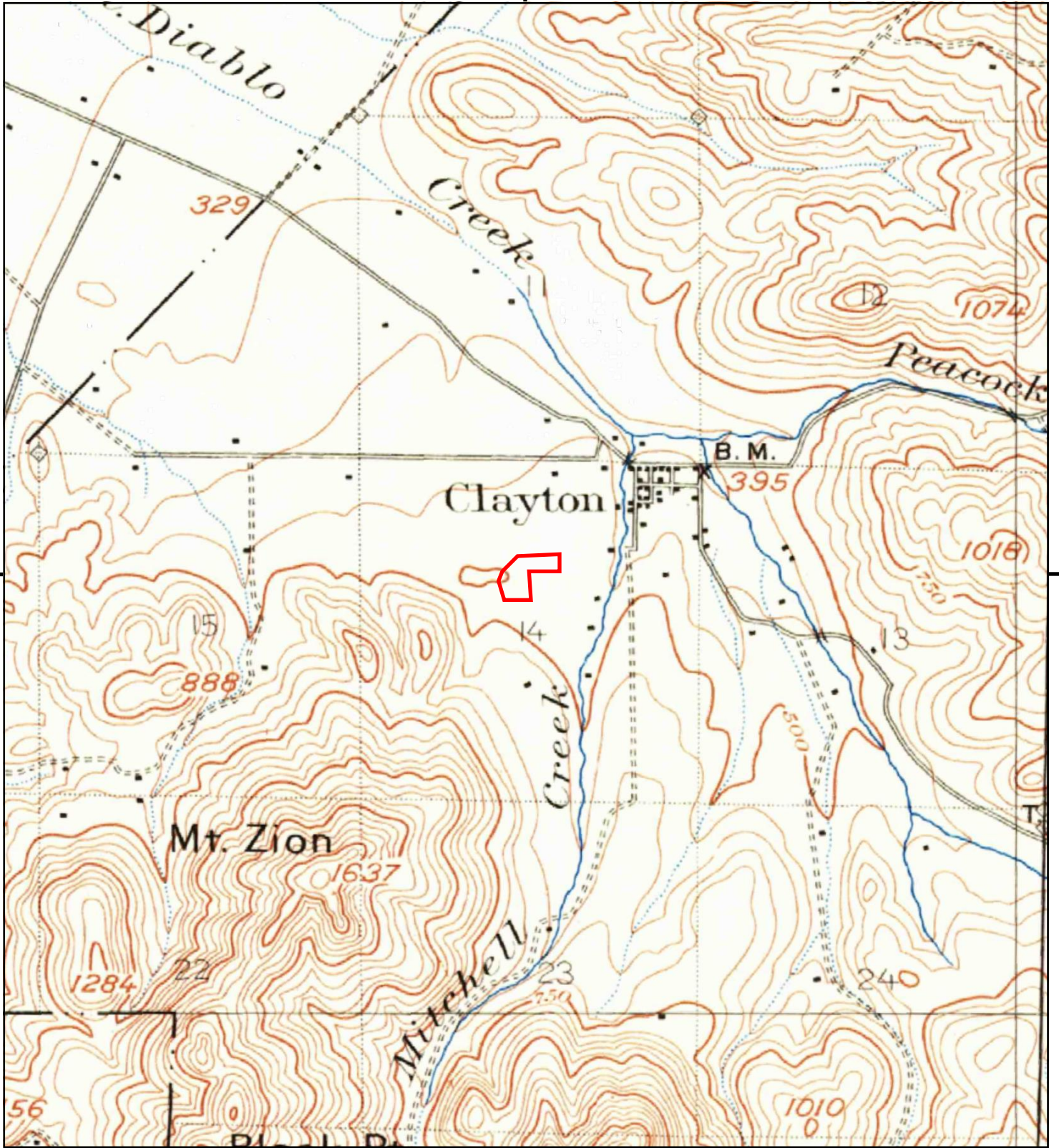
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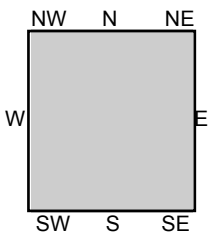
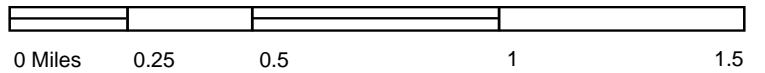
TP, Mt. Diablo, 1898, 15-minute

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton, CA 94517  
 CLIENT: AdvancedGeo, Inc.





This report includes information from the following map sheet(s).



TP, Mt. Diablo, 1896, 15-minute

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton, CA 94517  
 CLIENT: AdvancedGeo, Inc.



**Clayton Trust Property**

Mitchell Canyon Road  
Clayton, CA 94517

Inquiry Number: 5957509.5  
February 05, 2020

# The EDR-City Directory Image Report

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### SECTION

Executive Summary

Findings

City Directory Images

*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
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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Data by

*infoUSA*<sup>®</sup>

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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>
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1989	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1985	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1980	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1975	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

## FINDINGS

### TARGET PROPERTY STREET

Mitchell Canyon Road  
Clayton, CA 94517

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

### MITCHELL CANYON RD

2014	pg A1	EDR Digital Archive
2010	pg A2	EDR Digital Archive
2005	pg A3	EDR Digital Archive
2000	pg A4	EDR Digital Archive
1995	pg A5	EDR Digital Archive
1992	pg A6	EDR Digital Archive
1989	pg A7	Haines Criss-Cross Directory
1985	pg A8	Haines Criss-Cross Directory
1985	pg A9	Haines Criss-Cross Directory
1980	pg A10	Haines Criss-Cross Directory
1975	pg A11	Haines Criss-Cross Directory

## FINDINGS

### CROSS STREETS

No Cross Streets Identified

## **City Directory Images**



**MITCHELL CANYON RD 2014**

96	MITCHELL CANYON VISITOR CENTER MOUNT DIABLO SECTOR PARKS AND RECREATION CAL DEPT
100	ELLIOTT, JACQUELINE KATHY, PRATT MORRISON, CAMERON M PRATT, KATHY A RADWANSKI, STEPHEN SCHWARTZ, SUE C
515	CEMEX CNSTR MTLN PCF LLC
555	OCCUPANT UNKNOWN,
835	COOPER, WILLIAM C
895	STICE, JOHN E
999	LUCERO, ELIAZAR
1007	MELIN, BRIAN K
1013	SPENCER, SHAWN R
1019	OCCUPANT UNKNOWN,
1025	JARVIS, MATTHEW
1031	LUCKY, STEVEN W
1068	WESTON, TAMRA S
1074	BARTON, JOHN R
1080	OCCUPANT UNKNOWN,
1086	SCOTT, AMY E
1092	SCHWANDT, JAMES W
1098	LEWIS MICHAEL E LEWIS, MICHAEL E
1212	BYRD, KENNETH F

**MITCHELL CANYON RD 2010**

96	MOUNT DIABLO SECTOR STATE PARKS CALIFORNIA
100	KATHY, PRATT MORRISON, CAMERON M PRATT, KATHY A SALMON, EDWARD M SCHWARTZ, SUSAN C WHITE, TINA L
515	CEMEX MITCHELL
555	OCCUPANT UNKNOWN,
835	COOPER, WILLIAM C
895	SOLSTICE ELECTRIC DESIGN LLC
961	SHINGLETON, ARTHUR D
999	LUCERO, ELIAZAR
1007	TERRY, ANTHONY Y
1013	OCCUPANT UNKNOWN,
1019	OCCUPANT UNKNOWN,
1025	1UP SHIRTS LLC HARTLEY, ANNETTE V
1031	WILLERFORD, FRED J
1068	MITOLO KEN CONSTRUCTION OCCUPANT UNKNOWN,
1074	SIEGEL, VIRGINIA M
1080	MOLE, GERALD F
1086	FREEMAN, LUCY O
1092	SCHWANDT, JAMES W
1098	LEWIS MICHAEL E LEWIS, MIKE E
1212	BYRD, KENNETH F

**MITCHELL CANYON RD 2005**

515	R M C CEMEX MATERIALS INC
835	VANCE, DAN A
895	ST JUDE TRUST NO 1 STIELOW, GABRIEL R
901	STICE, JOHN J
961	SHINGLETON, ARTHUR D
999	OCCUPANT UNKNOWN,
1007	TERRY, ANTHONY Y
1013	OCCUPANT UNKNOWN,
1025	HARTLEY, ANNETTE V
1031	WILLERFORD, FRED J
1068	ROUSE, KEVIN R
1074	SIEGEL, VIRGINIA M
1080	OCCUPANT UNKNOWN,
1086	FREEMAN, LUCY O
1092	SCHWANDT, JAMES W
1098	LEWIS MICHAEL E LEWIS, MIKE E
1212	OCCUPANT UNKNOWN,

**MITCHELL CANYON RD 2000**

100 RADWANSKI, S  
515 RMC PACIFIC MATERIALS INC

**MITCHELL CANYON RD 1995**

515	RMC LONESTAR
835	CONTRA COSTA HARDWOOD FLR SVC
999	BROKEN WHEEL COCKTAIL LOUNGE
1007	CG ENTERPRISES

**MITCHELL CANYON RD 1992**

100 SMITH CUSTOM FIREARMS  
515 RMC LONESTAR  
555 YANCEY, DAVID B  
835 CONTRA COSTA HARDWOOD FLR SVC  
895 GARAVENTA, S  
898 CUTLER, MARK L  
901 STICE, J  
910 MAITLAND, JOHN B  
999 PETERSON, VERNON L  
WHEEL HOUSE RESTAURANT  
1007 CG ENTERPRISES  
GOODYEAR, J R  
1019 MARCELLA SHIERS ORIGINAL  
1074 WILLIAMSON, RONALD D  
1092 SCHWANDT, JAMES

## MITCHELL CANYON RD 1989

MITCHELL CNYN RD  
94517 CLAYTON

100	JUSTICE Irene S	672-0908	
	JUSTICE Robt A	672-0908	
555	YANCEY Harold F	672-7191	2
835	★CONTRA CST HRDWD SV	672-5111	2
	★VANCE DAN	672-5111	2
895	GARAVENTA S	672-5088	2
898	CUTLER Mark L	672-3921	5
901	STICE Julianne	672-5041	5
910	MAITLAND Etta F	672-1418	+9
	MAITLAND John B	672-1418	+9
	MAITLAND Johnny	672-1905	+9
	MAITLAND Joshua	672-1905	+9
961	XXXX	00	
999	PETERSON Vernon L	672-5052	2
1007	★C G ENTERPRISES	672-3456	0
	GOODYEAR J Richard	672-3456	
	GOODYEAR Margery	672-3456	
1013	SPENCER John E	672-5335	
	SPENCER Shawn	672-5335	
1019	XXXX	00	
1025	LARSEN Larry	672-9888	+9
	TIBBITTS Tammie	672-4517	+9
1031	MARTIN Stu	672-1944	+9
1074	WILLIAMSON Ronald D	672-2688	
	WILLIAMSON Sandra	672-2688	
1080	HOOSHMAND B	672-3905	+9
1092	SCHWANDT Christie	672-0199	
	SCHWANDT Jas	672-0199	6
	SCHWANDT Jas	672-7198	7
1098	XXXX	00	
NO #	★CA ST PKS	672-4266	6
NO #	★R M C LONESTAR	672-4900	+9
NO #	RADWANSKI S	672-7289	6
NO #	WILLIAMS Carolyn	672-2758	7
NO #	WILLIAMS Michael A	672-2758	
	★ 5 BUS 30 RES	9 NEW	

MITCHELL CANYON RD 1985

MITCHELL CANYON RD  
94517 CLAYTON

100	JUSTICE ROBT A	672-0908 +5
555	YANCEY HAROLD F	672-7191 2
A	REICHARD G HRSHOENG	672-6544 +5
835	CONTRA CST HROWD SV	672-5111 2

AY NOT BE KEYPUNCHED, ENTERED INTO A COMPUT



## MITCHELL CANYON RD 1985

MITCHELL CANYON RD		94517 CONT..	
	YANCE DAN	672-5111	2
895	GARAVENTA S	672-5088	2
898	CUTLER MARK L	672-3921	+5
901	STICE JULIANNE	672-5041	+5
961	YOUNG LES L	672-6428	2
999	PETERSON VERNON L	672-5052	2
1007	C G ENTERPRISES	672-3456	0
	GOODYEAR J RICHARD	672-3456	3
1013	XXXX	00	
1019	PENASKA S E	672-1342	0
1025	XXXX	00	
1031	BAKER C C	672-5089	2
1074	WILLIAMSON RONALD D	672-2688	3
	WILLIAMSON TYSA	672-2688	
1080	NOVAKOVICH WM J	672-4986	2
1092	SCHWANDT JAS	672-7198	+5
1098	XXXX	00	
NO #	GILILLAND RICHARD	672-9420	+5
NO #	LONE STAR INDS INC	672-4900	2
NO #	SMITH ANGUS	672-2429	1
★	5 BUS	19 RES	6 NEW

MITCHELL CANYON RD 1980

MITCHELL CANYON RD				
94517 CLAYTON				
6	555	YANCEY HAROLD F	798-4614	8
9	835★	CONTRA CST HRDWD FL	685-8168	9
7	★	VANCE DAN	685-8168	5
7	901	XXXX	00	
	961	YOUNG LES L	687-2398	8
	999	PETERSON VERNON L	685-6133	
	1007★	C G ENTERPRISES	672-3456+0	
		GOODYEAR J R	798-5459	9
	1013	XXXX	00	
3	1019	PENASKA S E	672-1342 +C	
0	1025	FROCK ROGER J	687-6841	8
	1031	BAKER C C	685-6982	
	1074	WILLIAMSON RONALD	687-0862	;
8	1080	MACDONALD AMY	672-1584 +	-
		NOVAKOVICH WM J	685-4858	
	1092	SCHWANDT JAS	798-4885	;
	1098	ANDRE BOB	672-0754	
	1498	MCKISSOCK JACK	682-6582	o
9	1500	ELLINGSON KARL	676-4799	9
0	1501	LERCH SAM P	689-9529	f
8	1506	KRAUSGRILL KEVIN	825-6254	;
	1507	SINCLAIR T J	689-9347	
9	1512	XXXX	00	
4	1513	VANIS JOS K	687-5544	3
	1519	DUKAS ANTHONY J	685-6679	3
	1531	HUSTON J J	676-9859	9
	1536	XXXX	00	
	1537	ROSS V	676-5585	8
	1543	ALEXANDER FLOYD R	689-6274	8
	1548	ATHERTON GARY	686-4590	
	1555	JONES KENNETH H	689-3994	
7	1561	FAIRCHILD MELVYN D	687-1287	5
	1567	BUSCAGLIA LOUIS	685-5808	2
	1573	CUNNINGHAM RUSSELL	682-8805	
	1576	FRASER E S JR	682-6978	
	1579	BELL GLEN D	676-1995	8
		BELL GLEN D DPM	686-4651	
	1582	SMITH C H	672-1513 +0	
	1585	FANZONE MICHAEL A	686-2962	
0	1588	XXXX	00	
	NO #★	LONE STAR INDS INC	685-3267	;
	★	4 BUS	37 RES	4 NEW

## MITCHELL CANYON RD 1975

MITCHELL CNYN RD 94517 CLAYTC		
100	DOWELL RICHARD	825-044
	HARA JOHN	825-044
	MCDONALD GEO E	685-33
200	XXXX	00
555	SILVA ANTHONY A	676-531
835*	CONTR CST HRDWD FLR	685-816
	VANCE DAN	685-816
955	SHERA LLOYD	685-694
999	PETERSON VERNON L	685-61
1007	HUNTER DALE	687-946
1013*	SPENCER J E&ASSOCS	689-798
1019	XXXX	00
1025	XXXX	00
1031	BAKER C C	685-6982
1068	XXXX	00
1074	WINSLOW JOHN F	689-330
1080	NOVAKOVICH WM J	685-4858
1092	BARNETTE E WHITIE	685-0386
1098	JOHNSTON SAM	687-6933
1212	XXXX	00
1498	AKINS REX C	689-1687
1500	JONES M D	825-4849
1501	LERCH SAM P	689-9529
1506	NORWOOD DAN	685-0811
1507	SINCLAIR T J	689-934
1512	MARTINEZ ARTHUR C	825-657
1513	VANIS JOS K	687-554
1519	DUKAS ANTHONY J	685-667
1531	COOK DAVID N DDS	686-250
1536	MEARES WM W	685-36
1537	ROSS RICHARD E DR	687-080
1542	XXXX	00
1543	ALEXANDER CURTIS R	687-23
1548	ATHERTON GARY	686-45
1554	XXXX	00
1555	JONES KENNETH H	689-30
1561	FAIRCHILD MELVYN D	687-12
1567	BUSCAGLIA LOUIS	685-51
1573	CUNNINGHAM RUSSELL	682-8
1576	FRASER E S JR	682-69
1579	BELL GLEN D	686-46
1585	FANZONE MICHAEL A	686-29
1588	RAULSTON E L	685-46
NO #*	LONE STAR IND INC	685-326
	* 3 BUS 18 RES 7 NEW	



# AEI Consultants

August 9, 2019

## PHASE I ENVIRONMENTAL SITE ASSESSMENT

### Property Information:

Mitchell Canyon Road  
Clayton, Contra Costa County, California 94517

### Project Information:

AEI Project No. 408841  
Client Reference No. 10020157

### Prepared For:

Ponderosa Homes  
5020 Franklin Drive Suite 200  
Pleasanton, California 94588

### Prepared By:

AEI Consultants  
2500 Camino Diablo, Suite 100  
Walnut Creek, California 94597-3940

Environmental  
Due Diligence

Building Assessments

Site Investigation  
& Remediation

Energy Performance  
& Benchmarking

Industrial Hygiene

Construction  
Risk Management

Zoning Analysis  
Reports & ALTA  
Surveys

National Presence  
Regional Focus  
Local Solutions

August 9, 2019

Carole Morris  
Ponderosa Homes  
5020 Franklin Drive Suite 200  
Pleasanton, California 94588

**Subject: Phase I Environmental Site Assessment**

Mitchell Canyon Road  
Clayton, California 94517  
AEI Project No. 408841  
Client Reference No. 10020157

Dear Carole Morris:

AEI Consultants is pleased to provide the *Phase I Environmental Site Assessment* of the above referenced property. This assessment was authorized and performed in accordance with the scope of services engaged.

We appreciate the opportunity to provide 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 (925) 746-6004 or [pmcintyre@aeiconsultants.com](mailto:pmcintyre@aeiconsultants.com).

Sincerely,



Peter McIntyre, PG  
Executive Vice President  
AEI Consultants

## PROJECT SUMMARY

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**Mitchell Canyon Road, Clayton, Contra Costa County, California 94517**  
**AEI Project No. 408841**

Report Section		REC	CREC	HREC	OEC	Recommended Action
1.0	Introduction					None
2.0	Site and Vicinity Description					None
3.0	Historical Review of Site and Vicinity				✓	See Findings
4.0	Regulatory Agency Records Review					None
5.0	Regulatory Database Records Review					None
6.0	Interviews and User Provided Information					None
7.0	Site Reconnaissance					None
8.1	Asbestos-Containing Building Materials					None
8.2	Lead-Based Paint					None
8.3	Radon					None
8.4	Mold					None



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## EXECUTIVE SUMMARY

AEI Consultants (AEI) was retained by Ponderosa Homes to conduct a Phase I ESA in conformance with AEI's contract and the scope and limitations of ASTM Standard Practice E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) for the property located at Mitchell Canyon Road, Clayton, Contra Costa County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Sections 1.4, 1.5, and 1.6 of this report.

Pertinent subject property information is noted below:

<b>PROPERTY INFORMATION</b>	
<b>Site Address(es)</b>	Mitchell Canyon Road, Clayton, Contra Costa County, California 94517
<b>Property ID (APN or Block/Lot)</b>	121-090-011-2 and 121-090-016-1
<b>Location</b>	West side of Mitchell Canyon Road
<b>Property Type</b>	Vacant Land
<b>SITE AND BUILDING INFORMATION</b>	
<b>Approximate Site Acreage/Source</b>	8.65/Client provided
<b>Number of Buildings</b>	One ancillary shed
<b>Building Construction Date(s)</b>	N/A
<b>Building Square Footage (SF)/Source</b>	N/A/N/A
<b>Number of Floors/Stories</b>	N/A
<b>Basement or Subgrade Area(s)</b>	None identified
<b>Number of Units</b>	N/A
<b>Additional Improvements</b>	N/A
<b>On-site Occupant(s)</b>	None identified
<b>Current On-site Operations/Use</b>	None identified - subject property is vacant land
<b>Current Use of Hazardous Substances</b>	None identified
<b>REGULATORY INFORMATION</b>	
<b>Regulatory Database Listing(s)</b>	None identified

A chronological summary of historical subject property information is as follows:

<b>Date Range</b>	<b>Subject Property Description and Occupancy (Historical Addresses)</b>	<b>Source(s)</b>
Prior to 1939	Unknown use/Data failure; refer to Section 1.6.1	Aerial photographs, Sanborn maps, agency records
1939-1958	Agricultural land	Aerial photographs
1963-Present	Vacant land	Aerial photographs

The immediately surrounding properties consist of the following:

<b>Direction</b>	<b>Tenant/Use (Address)</b>	<b>Regulatory Database Listing(s)</b>
<b>North</b>	Residences (895 Mitchell Canyon Road and 896-910 Mitchell Canyon Lane)	None identified

Direction	Tenant/Use (Address)	Regulatory Database Listing(s)
<b>East</b>	Mitchell Canyon Road, followed by: Residences (917-925 Kenston Drive)	None identified
<b>South</b>	Residences (15-28 Herriman Court and 835 Mitchell Canyon Road) and vacant land	None identified
<b>West</b>	Residences (5679-5783 Lewis Way)	None identified

If the surrounding properties are listed in the regulatory database, please refer to Section 5.1 for discussion.

## FINDINGS

Recognized Environmental Condition (REC) is defined by the ASTM Standard Practice E1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

- AEI did not identify evidence of RECs during the course of this assessment.

Controlled Recognized Environmental Condition (CREC) is defined by the ASTM Standard Practice E1527-13 as 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.

- AEI did not identify evidence of CRECs during the course of this assessment.

Historical Recognized Environmental Condition (HREC) is defined by the ASTM Standard Practice E1527-13 as 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.

- AEI did not identify evidence of HRECs during the course of this assessment.

Other Environmental Considerations (OEC) warrant discussion, but do not qualify as RECs as defined by the ASTM Standard Practice E1527-13. These include, but are not limited to, de minimis conditions and/or environmental considerations such as the presence of ACMs, LBP, radon, mold, and lead in drinking water, which can affect the liabilities and financial obligations of the client, the health and safety of site occupants, and the value and marketability of the subject property.

- Based on a review of aerial photographs, the subject property was historically used for agricultural purposes. There is potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on site, and that the subject property has been impacted by the use of such agricultural chemicals. AEI understands that the subject property is slated for residential redevelopment. According to Mr. Milan Sikela of the Clayton Planning Department, the City of Clayton does not have explicit soil sampling

requirements, but noted that projects may be subject to sampling requirements as part of the redevelopment process under the California Environmental Quality Act (CEQA). Consequently, AEI recommends the performance of on-site sampling to determine if the subject property has been significantly impacted in connection with the historical agricultural use for the protection of the construction workers and future occupants of the subject property.

### **CONCLUSIONS, OPINIONS, AND RECOMMENDATIONS**

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) of Mitchell Canyon Road, Clayton, Contra Costa County, California, the *subject property*. Any exceptions to, or deletions from, this practice are described in Sections 1.4, 1.5, and 1.6 of this report.

AEI did not identify evidence of RECs or CRECs in connection with the property except for those previously identified in the Findings section. AEI recommends the following:

- Subsurface investigation

## **1.0 INTRODUCTION**

---

This report documents the methods and findings of the Phase I Environmental Site Assessment performed in conformance with AEI's contract and scope and limitations of ASTM Standard Practice E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) for the property located at Mitchell Canyon Road, Clayton, Contra Costa County, California (Appendix A: Figures and Appendix B: Property Photographs).

### **1.1 SCOPE OF WORK**

The purpose of the Phase I ESA is to assist the client in identifying potential RECs, in accordance with ASTM E1527-13, associated with the presence of any hazardous substances or petroleum products, their use, storage, and disposal at and in the vicinity of the subject property. Property assessment activities focused on: 1) a review of federal, state, tribal, and local databases that identify and describe underground fuel tank sites, leaking underground fuel tank sites, hazardous waste generation sites, and hazardous waste storage and disposal facility sites within the ASTM approximate minimum search distance; 2) a property and surrounding site reconnaissance, and interviews with the past and present owners and current occupants and operators to identify potential environmental contamination; and 3) a review of historical sources to help ascertain previous land use at the site and in the surrounding area.

### **1.2 ADDITIONAL SERVICES**

Other Environmental Considerations such as ACMs, LBP, lead in drinking water, radon, mold, and wetlands can result in business environmental risks for property owners which may disrupt current or planned operations or cash flow and are generally beyond the scope of a Phase I assessment as defined by ASTM E1527-13. Based upon the agreed-on scope of services this ESA did not include subsurface or other invasive assessments, business environmental risks, or other services not specifically identified and discussed herein.

### **1.3 SIGNIFICANT ASSUMPTIONS**

The following assumptions are made by AEI in this report. AEI relied on information derived from secondary sources including governmental agencies, the client, designated representatives of the client, property contact, property owner, property owner representatives, computer databases, and personal interviews. AEI has reviewed and evaluated the thoroughness and reliability of the information derived from secondary sources including government agencies, the client, designated representatives of the client, property contact, property owner, property owner representatives, computer databases, or personal interviews. It appears that all information obtained from outside sources and reviewed for this assessment is thorough and reliable. However, AEI cannot guarantee the thoroughness or reliability of this information.

Groundwater flow, unless otherwise specified by on-site well data or well data from the subject property or nearby sites, is inferred from contour information depicted on the USGS topographic maps. AEI assumes the property has been correctly and accurately identified by the client, designated representative of the client, property contact, property owner, and property owner's representatives.

## 1.4 LIMITATIONS

Property conditions, as well as local, state, tribal, and federal regulations can change significantly over time. Therefore, the recommendations and conclusions presented as a result of this assessment apply strictly to the environmental regulations and property conditions existing at the time the assessment was performed. Available information has been analyzed using currently accepted assessment techniques and it is believed that the inferences made are reasonably representative of the property. AEI makes no warranty, expressed or implied, except that the services have been performed in accordance with generally accepted environmental property assessment practices applicable at the time and location of the assessment.

Considerations identified by ASTM as beyond the scope of a Phase I ESA that may affect business environmental risk at a given property include the following: ACMs, radon, LBP, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, mold, and high voltage lines. These environmental issues or conditions may warrant assessment based on the type of the property transaction; however, they are considered non-scope issues under ASTM Standard Practice E1527-13.

If requested by the client, these non-scope issues are discussed herein. Otherwise, the purpose of this assessment is solely to satisfy one of the requirements for qualification of the innocent landowner defense, contiguous property owner or bona fide prospective purchaser under CERCLA. ASTM Standard Practice E1527-13 and the United States EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) constitute the "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in:

1. 42 U.S.C. § 9601(35)(B), referenced in the ASTM Standard Practice E1527-13.
2. Sections 101(35)(B) (ii) and (iii) of CERCLA and referenced in the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312).
3. 42 U.S.C. § 9601(40) and 42 U.S.C. § 9607(q).

The Phase I Environmental Site Assessment is not, and should not be construed as, a warranty or guarantee about the presence or absence of environmental contaminants that may affect the property. Neither is the assessment intended to assure clear title to the property in question. The sole purpose of assessment into property title records is to ascertain a historical basis of prior land use. All findings, conclusions, and recommendations stated in this report are based upon facts, circumstances, and industry-accepted procedures for such services as they existed at the time this report was prepared (i.e., federal, state, and local laws, rules, regulations, market conditions, economic conditions, political climate, and other applicable matters). All findings, conclusions, and recommendations stated in this report are based on the data and information provided, current subject property use, and observations and conditions that existed on the date and time of the property reconnaissance.

Responses received from local, state, or federal agencies or other secondary sources of information after the issuance of this report may change certain facts, findings, conclusions, or circumstances to the report. A change in any fact, circumstance, or industry-accepted procedure upon which this report was based may adversely affect the findings, conclusions, and recommendations expressed in this report.

AEI's limited radon screening, if included, is intended to provide a preliminary screening to evaluate the potential presence of elevated radon concentrations at the site. The proposed scope is not intended to define the full extent of the presence of radon at the subject property. As such, the results should be used for lending purposes only. The recommendations and conclusions presented as a result of the limited preliminary radon screening apply strictly to the property conditions existing at the time the sampling was performed. The sample analytical results are only valid for the time, place, and condition of the site at the time of collection and AEI does not warrant that the results will be repeatable or are representative of past or future conditions.

### **1.5 LIMITING CONDITIONS/DEVIATIONS**

The performance of this assessment was limited by the following:

- While additional assessments may have been conducted on the subject property, these documents must be provided for AEI's review in order for the information to be summarized/included in this report. Please refer to Section 6.3 for a summary of previous reports and other documentation provided to AEI during this assessment.
- The User did not complete the ASTM User Questionnaire or provide the User information to AEI. AEI assumes that qualification for the LLPs is being established by the User in documentation outside of this assessment.
- Due to the size of the subject property, AEI performed a reconnaissance of the property utilizing a field technique of traversing the site in an attempt to provide an overlapping field of view. Due to the size of the property and the vegetation present on site, isolated areas of the site may have not been accessible for direct observation during AEI's field reconnaissance. Based on the nature of property use, this limitation is not expected to significantly alter the findings of this assessment.

### **1.6 DATA FAILURE AND DATA GAPS**

According to ASTM E1527-13, data gaps occur when the Environmental Professional is unable to obtain information required by the Standard, despite good faith efforts to gather such information. Pursuant to ASTM E1527-13, only significant data gaps, defined as those that affect the ability of the Environmental Professional to identify RECs, need to be documented.

Data failure is one type of data gap. According to ASTM E1527-13, data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met. Pursuant to ASTM E1527-13, historical sources are required to document property use back to the property's first developed use or back to 1940, whichever is earlier, or periods of five years or greater.

### 1.6.1 DATA FAILURE

The following data failure was identified during the course of this assessment:

<b>Data Failure</b>	The earliest historical resource obtained during this assessment was an aerial photograph from 1939 indicating that the subject property was developed agriculturally. The lack of historical sources for the subject property dating back to first developed use represents historical data source failure. However, as it is assumed that the subject property would have been previously used for agricultural purposes, if not undeveloped, this data failure is not expected to significantly alter the findings of this assessment.
<b>Information/Sources Consulted</b>	City directories, Sanborn fire insurance maps, aerial photographs, agency records, previous reports, interviews

### 1.6.2 SIGNIFICANT DATA GAPS

AEI did not identify significant data gaps which affected our ability to identify RECs.

### 1.7 RELIANCE

All reports, both verbal and written, are for the benefit of Ponderosa Homes. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. 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 AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's contract and Terms and Conditions executed by Ponderosa Homes on July 10, 2019. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.



## 2.0 SITE AND VICINITY DESCRIPTION

### 2.1 SITE LOCATION AND DESCRIPTION

PROPERTY INFORMATION	
Site Address(es)	Mitchell Canyon Road, Clayton, Contra Costa County, California 94517
Property ID (APN or Block/Lot)	121-090-011-2 and 121-090-016-1
Location	West side of Mitchell Canyon Road
Property Type	Vacant Land
SITE AND BUILDING INFORMATION	
Approximate Site Acreage/Source	8.65/Client provided
Number of Buildings	One ancillary shed
Building Construction Date(s)	N/A
Building Square Footage (SF)/Source	N/A/N/A
Number of Floors/Stories	N/A
Basement or Subgrade Area(s)	None identified
Number of Units	N/A
Additional Improvements	N/A
On-site Occupant(s)	None identified
Current On-site Operations/Use	None identified - subject property is vacant land
Current Use of Hazardous Substances	None identified
REGULATORY INFORMATION	
Regulatory Database Listing(s)	None identified

### 2.2 ON-SITE UTILITIES

Utility	Source/System Information
Heating System	PG&E
Cooling System	PG&E
Potable Water	Contra Costa Water District
Sewage Disposal/Treatment	City of Clayton

Utility source/system information listed in the table above is provided by online research, unless otherwise noted above. The above information describes the utility information that serves the surrounding area.

### 2.3 SITE AND VICINITY CHARACTERISTICS

The subject property is located in a residential area of Clayton, California. The immediately surrounding properties consist of the following:

Direction	Tenant/Use (Address)	Regulatory Database Listing(s)
North	Residences (895 Mitchell Canyon Road and 896-910 Mitchell Canyon Lane)	None identified

<b>Direction</b>	<b>Tenant/Use (Address)</b>	<b>Regulatory Database Listing(s)</b>
<b>East</b>	Mitchell Canyon Road, followed by: Residences (917-925 Kenston Drive)	None identified
<b>South</b>	Residences (15-28 Herriman Court and 835 Mitchell Canyon Road) and vacant land	None identified
<b>West</b>	Residences (5679-5783 Lewis Way)	None identified

If the surrounding properties are listed in the regulatory database, please refer to Section 5.1 for discussion.

## 2.4 PHYSICAL SETTING

<b>Geologic Unit: Description/Source</b>	Qa: Surficial sediments, alluvial gravel, sand and clay of valley areas, age late Holocene/USGS and United States Department of the Interior
<b>Soil Series: Description/Source</b>	PaC: Perkins gravelly loam, gravelly loam to gravelly clay loam; and GcE: Gilroy clay loam, clay loam to very gravelly loam to bedrock/USDA Soil Survey
<b>Groundwater Flow Direction/Source</b>	Northeast/Topographic map interpretation
<b>Estimated Depth to Groundwater/ Source</b>	Greater than 50 feet bgs/Groundwater data for the nearby site at 2484 Pine Hollow Road, obtained from GeoTracker
<b>Surface waters on the subject property or adjacent sites</b>	None
<b>Additional notes</b>	None

Note: Groundwater flow direction can be influenced locally and regionally by the presence of local wetland features, surface topography, recharge and discharge areas, horizontal and vertical inconsistencies in the types and location of subsurface soils, and proximity to water pumping wells. Depth and gradient of the water table can change seasonally in response to variation in precipitation and recharge, and over time, in response to urban development such as storm water controls, impervious surfaces, pumping wells, cleanup activities, dewatering, seawater intrusion barrier projects near the coast, and other factors.

### 3.0 HISTORICAL REVIEW OF SITE AND VICINITY

Reasonably ascertainable standard historical sources as outlined in ASTM Standard E1527-13 were used to determine previous uses and occupancies of the subject property that are likely to have led to RECs in connection with the subject property. A chronological summary of historical data found, including but not limited to aerial photographs, historical city directories, Sanborn fire insurance maps, and agency records, is as follows:

<b>Date Range</b>	<b>Subject Property Description and Occupancy (Historical Addresses)</b>	<b>Source(s)</b>
Prior to 1939	Unknown use/Data failure; refer to Section 1.6.1	Aerial photographs, Sanborn maps, agency records
1939-1958	Agricultural land	Aerial photographs
1963-Present	Vacant land	Aerial photographs

Based on a review of aerial photographs, the subject property was historically used for agricultural purposes. There is potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on site, and that the subject property has been impacted by the use of such agricultural chemicals. AEI understands that the subject property is slated for residential redevelopment. According to Mr. Milan Sikela of the Clayton Planning Department, the City of Clayton does not have explicit soil sampling requirements, but noted that projects may be subject to sampling requirements as part of the redevelopment process under the California Environmental Quality Act (CEQA). Consequently, AEI recommends the performance of on-site sampling to determine if the subject property has been significantly impacted in connection with the historical agricultural use for the protection of the construction workers and future occupants of the subject property.

If available, copies of historical sources are provided in the report appendices.

#### 3.1 AERIAL PHOTOGRAPHS

AEI reviewed aerial photographs of the subject property and surrounding area. A search was made of the EDR collection of aerial photographs. Aerial photographs were reviewed for the following years:

<b>Year(s)</b>	<b>Subject Property Description</b>	<b>Adjacent Site Descriptions</b>
1939, 1946, 1949, 1950, 1958	Agricultural land including orchards	NORTH: Agricultural land EAST: A road, followed by agricultural land SOUTH: Agricultural land WEST: Agricultural land
1963	Vacant land with remnants of orchards	NORTH: Vacant land EAST: A road, followed by residences SOUTH: Vacant land WEST: Vacant land

Year(s)	Subject Property Description	Adjacent Site Descriptions
1966	No significant changes	NORTH: No significant changes EAST: No significant changes SOUTH: Developed with the existing residences WEST: No significant changes
1979, 1982	No significant changes	NORTH: No significant changes EAST: No significant changes SOUTH: No significant changes WEST: Developed with the existing residences
1993, 1998, 2006, 2009, 2012, 2016	Vacant land with a small ancillary structure in the northwestern portion of the subject property	NORTH: Developed with the existing residences EAST: No significant changes SOUTH: No significant changes WEST: No significant changes

Based on a review of aerial photographs, the subject property appears to have been developed with agricultural land from at least 1939 to 1958, please refer to Section 3.0 for additional information.

**3.2 SANBORN FIRE INSURANCE MAPS**

Sanborn Fire Insurance maps were developed in the late 1800s and early 1900s for use as an assessment tool for fire insurance rates in urbanized areas. A search was made of the EDR collection of Sanborn Fire Insurance maps.

Sanborn map coverage was not available for the subject property.

**3.3 CITY DIRECTORIES**

Since the subject property has never been developed, no physical address has been provided to or identified by AEI during the course of this assessment. Based on the lack of physical address, a search of city directories for the subject property was not feasible.

**3.4 HISTORICAL TOPOGRAPHIC MAPS**

Based on the quality of information obtained from other sources, historical topographic maps were not reviewed as a part of this assessment.

**3.5 CHAIN OF TITLE**

Based on the quality of information obtained from other sources, a chain of title search was not performed as part of this assessment.

## 4.0 REGULATORY AGENCY RECORDS REVIEW

Local and state agencies, such as environmental health departments, fire prevention bureaus, and building and planning departments are contacted to identify any current or previous reports of hazardous substance use, storage, and/or unauthorized releases that may have impacted the subject property. In addition, information pertaining to AULs, defined as legal or physical restrictions, or limitations on the use of, or access to, a site or facility, is requested.

### 4.1 LOCAL ENVIRONMENTAL HEALTH DEPARTMENT AND/OR STATE ENVIRONMENTAL AGENCY

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Contra Costa County Hazardous Materials Programs (CCCHMP)	July 17, 2019	Email	Ms. Alex McMullen	No records on file

### 4.2 FIRE DEPARTMENT

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Contra Costa County Fire Protection District (CCCFPD)	July 17, 2019	Email	Ms. Cindy McGrath	No records on file

### 4.3 BUILDING DEPARTMENT

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Clayton Building Department (CBD)	July 31, 2019	Telephone	Staff	No records on file

### 4.4 PLANNING DEPARTMENT

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Clayton Planning Department (CPD)	July 17, 2019	Telephone	Mr. Milan Sikela	No evidence indicating the existence of AULs on file for the subject property

### 4.5 ASSESSOR'S OFFICE

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Contra Costa County Assessor's Office	July 17, 2019	Website	N/A	Information obtained is discussed below

#### Records Summary

<b>APN</b>	121-090-011-2 and 121-090-016-1
<b>Acreage</b>	8.65 acres
<b>Construction Date</b>	N/A

<b>Building Square Footage</b>	N/A square feet
<b>Current Owner</b>	Fred Clayton and Karen Isobe Trust

#### 4.6 OTHER AGENCIES SEARCHED

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
CA State Water Resources Control Board (SWRCB) GeoTracker	July 17, 2019	Website	N/A	No records on file
CA Department of Toxic Substances Control (DTSC) Hazardous Waste Tracking System (HWTS)	July 17, 2019	Website	N/A	No records on file
CA DTSC EnviroStor	July 17, 2019	Website	N/A	No records on file
Bay Area Air Quality Management District (BAAQMD)	July 17, 2019	Website	Ms. Rochelle Reed	No records on file

No other agencies were contacted during the course of this assessment.

#### 4.7 OIL AND GAS WELLS

Agency	Date Referenced	Resource	Oil or gas wells located within 500 feet of the subject property
State of California Department of Conservation, Division of Oil, Gas & Geothermal Resources (CA DOGGR)	July 17, 2019	CA DOGGR Map	No

#### 4.8 OIL AND GAS PIPELINES

Agency	Date Referenced	Resource	Pipelines located within 500 feet of the subject property
National Pipeline Mapping System (NPMS)	July 17, 2019	NPMS Public Map Viewer	No

#### 4.9 STATE ENVIRONMENTAL SUPERLIENS

In accordance with our approved scope of services, AEI did not assess whether the subject property is subject to any state environmental superliens.

#### 4.10 STATE PROPERTY TRANSFER LAWS

In accordance with our approved scope of services, AEI did not assess whether the subject property is subject to any state property transfer laws.

## 5.0 REGULATORY DATABASE RECORDS REVIEW

AEI contracted EDR to conduct a search of publicly available information from federal, state, tribal, and local databases containing known and suspected sites of environmental contamination and sites of potential environmental significance. Data gathered during the current regulatory database search is compiled by EDR into one regulatory database report. Location information for listed sites is designated using geocoded information provided by federal, state, or local agencies and commonly used mapping databases with the exception of "Orphan" sites. Due to poor or inadequate address information, Orphan sites are identified but not geocoded/mapped by EDR, rather, information is provided based upon vicinity zip codes, city name, and state. The number of listed sites identified within the approximate minimum search distance from the federal and state environmental records database listings specified in ASTM Standard E1527-13 is summarized in Section 5.1, along with the total number of Orphan sites. A copy of the regulatory database report, which includes detailed descriptions of the databases noted below, is included in Appendix C of this report.

In determining if a listed site is a potential environmental concern to the subject property, AEI generally applies the following criteria to classify the site as lower potential environmental concern: 1) the site only holds an operating permit (which does not imply a release), 2) the site's distance from, and/or topographic position relative to, the subject property, and/or 3) the site has recently been granted "No Further Action" by the appropriate regulatory agency.

Regulatory database listings associated with the subject property, adjacent site(s) and/or nearby sites of concern that were determined to warrant additional discussion are identified and further discussed in Section 5.1.

### 5.1 RECORDS SUMMARY

Database	Search Distance (Miles)	Listings Within Search Distance	Subject Property	Adjacent Site(s)	Other Nearby Sites of Concern
NPL	1.0	0			
DELISTED NPL	0.5	0			
SEMS/CERCLIS	0.5	0			
SEMS-ARCHIVE/CERCLIS NFRAP	0.5	0			
RCRA CORRACTS	1.0	0			
RCRA-TSDF	0.5	0			
RCRA LQG, SQG, CESQGs, NLR	SP/ADJ	0			
US ENG CONTROLS	SP	0			
US INST CONTROLS	SP	0			
ERNS	SP	0			
STATE/TRIBAL HWS	1.0	0			
STATE/TRIBAL SWLF	0.5	0			
STATE/TRIBAL REGISTERED STORAGE TANKS	SP/ADJ	0			
STATE/TRIBAL LUST	0.5	2			

Database	Search Distance (Miles)	Listings Within Search Distance	Subject Property	Adjacent Site(s)	Other Nearby Sites of Concern
STATE/TRIBAL EC and IC	SP	0			
STATE/TRIBAL VCP	0.5	0			
STATE/TRIBAL BROWNFIELD	0.5	0			
ORPHAN	N/A	0			
ADDITIONAL ENVIRONMENTAL RECORD SOURCES	SP/ADJ	0			

## 5.2 VAPOR MIGRATION

AEI reviewed reasonably ascertainable information for the subject and nearby properties, including a regulatory database, files for nearby release sites, and/or historical documentation, to determine if potential vapor-phase migration concerns may be present which could impact the subject property.

Based on a review of available resources as documented in this report, AEI did not identify significant on-site concerns and/or regulated listings from nearby sites which suggest that a vapor-phase migration concern currently exists at the subject property.



## 6.0 INTERVIEWS AND USER PROVIDED INFORMATION

### 6.1 INTERVIEWS

Pursuant to ASTM E1527-13, the following interviews were performed during this assessment in order to obtain information indicating RECs in connection with the subject property.

#### 6.1.1 OWNER AND KEY SITE MANAGER

Relation to Property	Name	Date Interviewed	Method of Contact	Year First Associated w/ Property	Notes
Owner/Owner Representative	Fred Clayton and Karen Isobe Trust	August 5, 2019	Email	Circa 1970	Interviewed; see Interview Summary table below
Key Site Manager	Mr. Bruce Bauer	July 31, 2019	In Person	Unknown	Interviewed; see Interview Summary table below

#### Interview Summary

Question	Owner (Representative) Response/ Comment	Key Site Manager Response/ Comment
Do you have any knowledge of USTs, clarifiers or oil/water separators, sumps, or other subsurface features?	No	No
Do you have any knowledge of previous environmental investigations conducted on site?	No	No
Do you have any knowledge of current or past industrial operations and/or other operations which would involve the use of hazardous substances and/or petroleum products?	No	No
Are you aware of any known plans for site redevelopment or change in site use?	No	No
Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property?	No	No
Are you aware of any pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property?	No	No
Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?	No	No
Are you aware of any incidents of flooding, leaks, or other water intrusion, and/or complaints related to indoor air quality?	No	No
Additional information provided:	N/A	N/A

#### 6.1.2 PAST OWNERS, OPERATORS, AND OCCUPANTS

AEI did not attempt to interview past owners, operators, and occupants of the subject property because information from these sources would likely be duplicative of information already

obtained from other sources.

### 6.1.3 INTERVIEW WITH OTHERS

Information obtained during interviews with local government officials is incorporated into the appropriate segments of this report.

### 6.2 USER PROVIDED INFORMATION

User provided information is intended to help identify the possibility of RECs in connection with the subject property. According to ASTM E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), certain items should be researched by the prospective landowner or grantee, and the results of such inquiries may be provided to the Environmental Professional. The responsibility for qualifying for LLPs by conducting the inquiries ultimately rests with the User, and providing the information to the Environmental Professional would be prudent if such information is available.

The User did not complete the ASTM User Questionnaire or provide the User information to AEI. AEI assumes that qualification for the LLPs is being established by the User in documentation outside of this assessment.

Question	Response/ Comment
<p><b>1. Environmental liens that are filed or recorded against the property (40 CFR 312.25)</b></p> <p>Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?</p>	<p>Information not provided</p>
<p><b>2. Activity and use limitations that are in place on the property or that have been filed or recorded against the property (40 CFR 312.26(a)(1)(v) and vi)).</b></p> <p>Did a search of recorded land title records (or judicial records where appropriate) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?</p>	<p>Information not provided</p>
<p><b>3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).</b></p> <p>Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?</p>	<p>Information not provided</p>
<p><b>4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).</b></p> <p>Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?</p>	<p>Information not provided</p>

Question	Response/ Comment
<p><b>5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).</b></p> <p>Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:</p> <p>(a) Do you know the past uses of the property?</p> <p>(b) Do you know of specific chemicals that are present or once were present at the property?</p> <p>(c) Do you know of spills or other chemical releases that have taken place at the property?</p> <p>(d) Do you know of any environmental cleanups that have taken place at the property?</p>	Information not provided
<p><b>6. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).</b></p> <p>Based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?</p>	Information not provided

### 6.3 PREVIOUS REPORTS AND OTHER PROVIDED DOCUMENTATION

No prior reports or other relevant documentation in association with the subject property was made available to AEI during the course of this assessment.

### 6.4 ENVIRONMENTAL LIEN SEARCH

In accordance with our approved scope of services, an environmental lien search was not performed as part of this assessment.

## 7.0 SITE RECONNAISSANCE

<b>Site Reconnaissance Date</b>	July 31, 2019
<b>AEI Site Assessor(s)</b>	Lea Palumbo
<b>Property Escort(s)/ Relationship(s) to Property</b>	N/A
<b>Units/Areas Observed</b>	Representative portions of the subject property
<b>Area(s) not accessed and reason(s)</b>	The interior of the ancillary shed on site Refer to Section 1.5 for discussion of limiting condition(s).
<b>Other Physical Constraints</b>	None

### *Reconnaissance Findings Summary*

<b>Feature</b>	<b>Observed on Subject Property (see Section 7.1)</b>	<b>Observed on Adjacent Property (see Section 7.2)</b>
Regulated Hazardous Substances/Wastes and/or Petroleum Products in Connection with Property Use		
Aboveground/Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)		
Hazardous Substance and Petroleum Product Containers Not in Connection with Property Use		
Unidentified Substance Containers		
Electrical or Mechanical Equipment Likely to Contain Fluids		✓
Interior Stains or Corrosion		
Strong, Pungent, or Noxious Odors		
Pools of Liquid		
Drains, Sumps, and Clarifiers		✓
Pits, Ponds, and Lagoons		
Stained Soil or Pavement		
Stressed Vegetation		
Solid Waste Disposal or Evidence of Fill Materials		
Waste Water Discharges		
Wells		
Septic Systems		
Biomedical Wastes		
Other		

### **7.1 SUBJECT PROPERTY RECONNAISSANCE FINDINGS**

During the site reconnaissance, AEI did not observe any of the items listed in the above Reconnaissance Findings Summary table.

### **7.2 ADJACENT PROPERTY RECONNAISSANCE FINDINGS**

During the site reconnaissance, AEI observed the items listed in the above Reconnaissance Findings Summary table, which are further discussed below.

## **ELECTRICAL OR MECHANICAL EQUIPMENT LIKELY TO CONTAIN FLUIDS**

Toxic PCBs were commonly used historically in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors. According to United States EPA regulation 40 CFR, Part 761, there are three categories for classifying such equipment: <50 ppm of PCBs is considered "Non-PCB"; between 50 and 500 ppm is considered "PCB-Contaminated"; and >500 ppm is considered "PCB-Containing." Pursuant to 15 U.S.C. 2605(e)(2)(A), the manufacture, process, or distribution in commerce or use of any polychlorinated biphenyl in any manner other than in a totally enclosed manner was prohibited after January 1, 1977.

### *Transformers*

The management of potential PCB-containing transformers is the responsibility of the local utility or the transformer owner. Actual material samples need to be collected to determine if transformers are PCB-containing.

Several pole-mounted transformers were observed on the adjacent sites during the site reconnaissance. No spills, staining, or leaks were observed on or around the transformers. Based on the good condition of the equipment, the transformers are not expected to represent a significant environmental concern.

## **DRAINS, SUMPS, AND CLARIFIERS**

Several storm drains were observed in the parking areas of the adjacent properties and adjacent roadways. AEI did not observe evidence of hazardous substances or petroleum products in the vicinity of the drains. Based on the use of the drains solely for storm water runoff, the presence of the drains is not expected to represent a significant environmental concern.

## **8.0 NON-ASTM SERVICES**

---

### **8.1 ASBESTOS-CONTAINING BUILDING MATERIALS**

The subject property is currently vacant land or lacks structures. Consequently, no building components containing suspect asbestos containing materials were identified during the site inspection.

### **8.2 LEAD-BASED PAINT**

The subject property is currently vacant land or lacks structures. Consequently, AEI did not observe building components likely to contain suspect LBP during the site reconnaissance.

### **8.3 RADON**

Radon is a naturally-occurring, odorless, and invisible gas. Natural radon levels vary and are closely related to geologic formations. Radon may enter buildings through basement sumps or other openings.

Radon sampling was not requested as part of this assessment. According to the California Department of Health Services Radon Database, 6 tests were conducted for radon levels in the subject property zip code (94517) in 2016. All of these tests indicated that radon levels were below the action level of 4.0 pCi/L set forth by the US EPA. Therefore, radon is not expected to represent a significant environmental concern.

### **8.4 MOLD**

The subject property is currently vacant land or lacks structures. Consequently, mold was not addressed as part of this assessment.

## 9.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONALS

---

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR Part 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:



Lea Palumbo  
Project Manager

Reviewed By:



Richard D. Fehler  
Senior Author

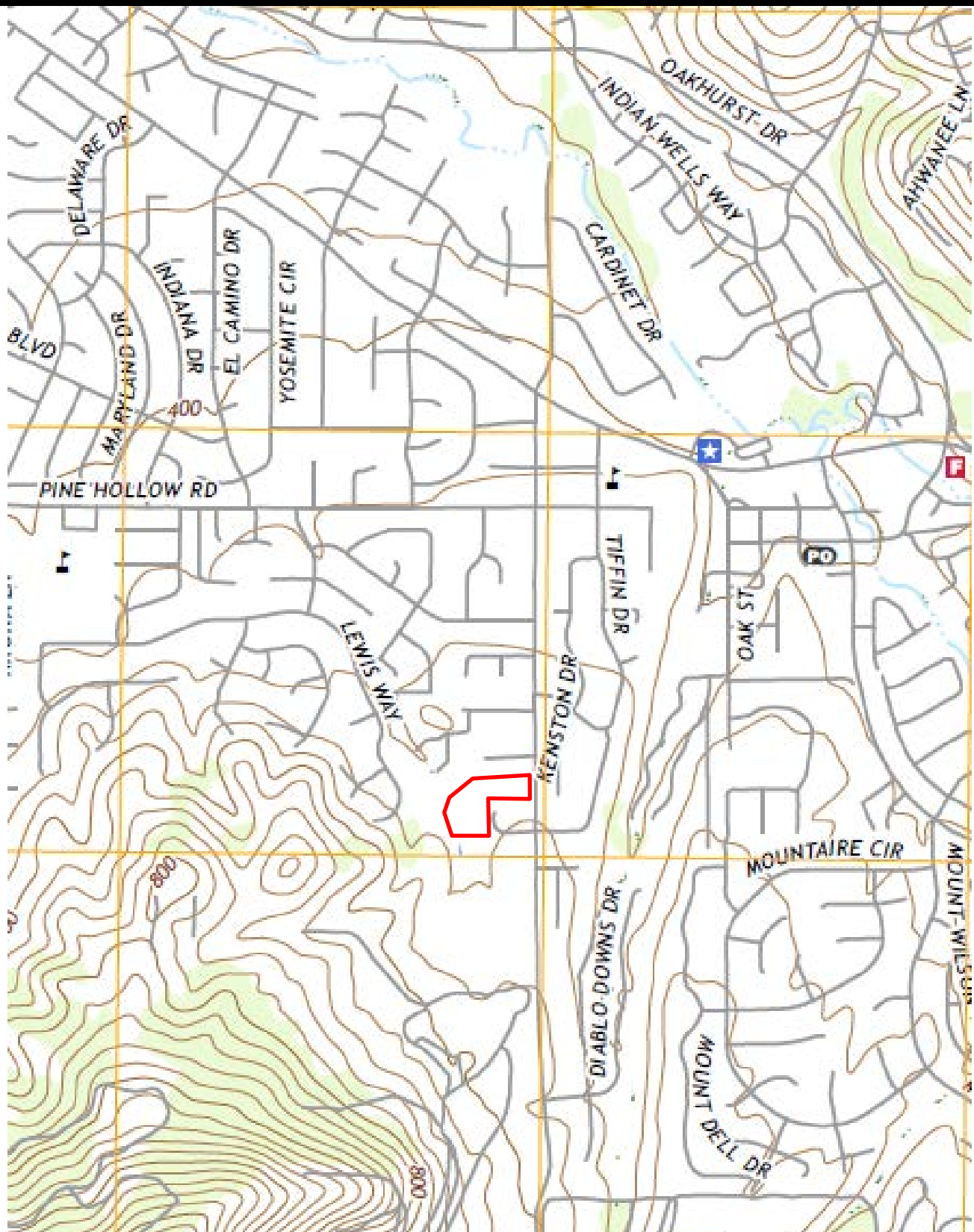
## 10.0 REFERENCES

Item	Date(s)	Source
Soils Information	Accessed July 2019	USDA Web Soil Survey <a href="http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx">http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</a>
Topographic Map	2018	USGS, Clayton
Depth to Groundwater Information	March 26, 1997	Groundwater data for the nearby site at 2484 Pine Hollow Road, obtained from GeoTracker
Aerial Photographs	1939-2016 (non-inclusive)	EDR
Sanborn Map Report/Search	July 17, 2019	EDR
City Directories	July 17, 2019	AEI's private collection of Haines and Company Criss-Cross Directories
Environmental Health Department	July 17, 2019	Contra Costa County Hazardous Materials Programs
Fire Department	July 17, 2019	Contra Costa County Fire Protection District
Building Department	July 31, 2019	Clayton Building Department
Planning Department	July 17, 2019	Clayton Planning Department
Assessor's Information and Parcel Map	July 17, 2019	Contra Costa County Assessor's Office
Other Agencies Searched	July 17, 2019	SWRCB GeoTracker, DTSC HWTS, and DTSC EnviroStor databases, BAAQMD
Oil and Gas Wells	July 17, 2019	State of California Department of Conservation, Division of Oil, Gas & Geothermal Resources
Oil and Gas Pipelines	July 17, 2019	NPMS Public Map Viewer <a href="https://www.npms.phmsa.dot.gov/PublicViewer/composite.jsf">https://www.npms.phmsa.dot.gov/PublicViewer/composite.jsf</a>
Regulatory Database Report	July 17, 2019	EDR
Interview with Key Site Manager	July 31, 2019	Mr. Bruce Bauer
Radon Zone Information	2016	California DPH



# APPENDIX A

## FIGURES



**Legend**

Approximate Property Boundary ————

Source: USGS Topographic Map *Clayton, California* (2018)

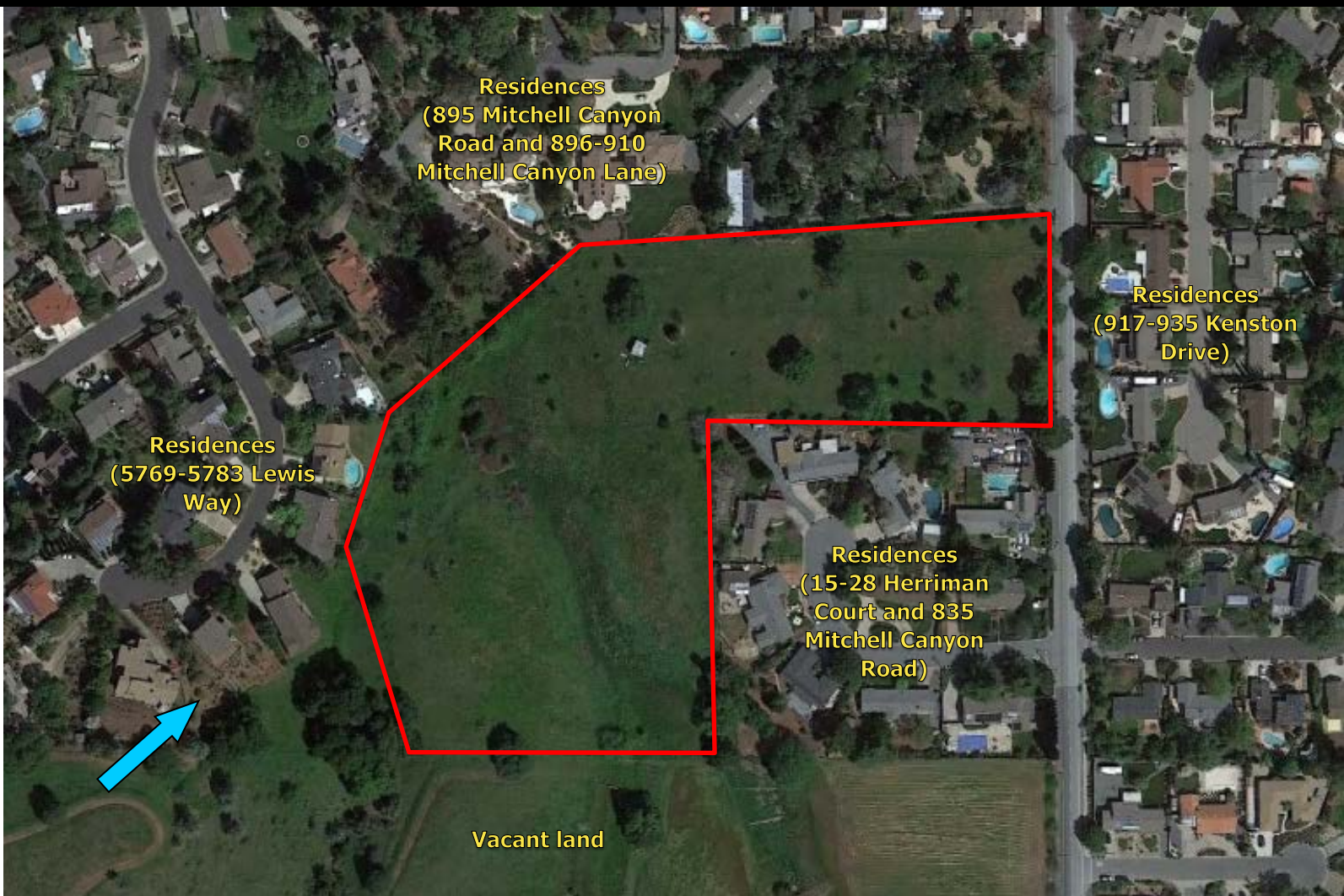


**Figure 1: TOPOGRAPHIC MAP**

Mitchell Canyon Road, Clayton, California 94517

Project Number: 408841

**AEI**  
Consultants



Legend

Estimated Groundwater Flow Direction 

Approximate Property Boundary 

Listed in Environmental Database Report



## Figure 2: SITE MAP

Mitchell Canyon Road, Clayton, California 94517

Project Number: 408841

**AEI**  
Consultants

# **APPENDIX B**

## **PROPERTY PHOTOGRAPHS**



1. West-facing view of subject property from Mitchell Canyon Road



2. View of north portion of subject property



3. View of northeast portion of subject property



4. View of subject property and south adjacent residence



5. East-facing view of subject property



6. View of subject property and west adjacent residences



7. View of shed on northwest portion of subject property



8. View of shed on northwest portion of subject property





9. View of water pump on subject property



10. View of mowers on subject property



11. View of north adjacent residence



12. View of east adjacent residences

# **APPENDIX C**

## **REGULATORY DATABASE**

**408841**

Mitchell Canyon Road  
Clayton, CA 94517

Inquiry Number: 5720065.2s  
July 17, 2019

## The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://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

MITCHELL CANYON ROAD  
CLAYTON, CA 94517

#### COORDINATES

Latitude (North): 37.9355150 - 37° 56' 7.85"  
Longitude (West): 121.9432540 - 121° 56' 35.71"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 592864.2  
UTM Y (Meters): 4198981.5  
Elevation: 506 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5640430 CLAYTON, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140606  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
MITCHELL CANYON ROAD  
CLAYTON, CA 94517

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">1</a>	ZACK & KIKI TURNIN	1205 AMARANTH DR	RCRA NonGen / NLR	Lower	1057, 0.200, NW
<a href="#">2</a>	MICHAEL SIBBITT	890 COACHMAN PLACE	RCRA NonGen / NLR	Lower	1150, 0.218, SE
<a href="#">3</a>	CEMEX CLAYTON QUARRY	515 MITCHELL CANYON	MINES	Higher	1242, 0.235, SSW
<a href="#">4</a>	CEMEX CONSTRUCTION M	515 MITCHELL CANYON	LUST, AST, CERS HAZ WASTE, SWEEPS UST, CERS TANKS,	Higher	1404, 0.266, SSW
<a href="#">5</a>	KAISER SAND & GRAVEL	2484 PINE HOLLOW RD	LUST, HIST CORTESE, CERS	Lower	2433, 0.461, NW

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List



## EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

### **Federal ERNS list**

ERNS..... Emergency Response Notification System

### **State- and tribal - equivalent NPL**

RESPONSE..... State Response Sites

### **State- and tribal - equivalent CERCLIS**

ENVIROSTOR..... EnviroStor Database

### **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF..... Solid Waste Information System

### **State and tribal leaking storage tank lists**

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC..... Statewide SLIC Cases

### **State and tribal registered storage tank lists**

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

### **State and tribal voluntary cleanup sites**

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

## EXECUTIVE SUMMARY

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL.....	Delisted National Clandestine Laboratory Register
HIST Cal-Sites.....	Historical Calsites Database
SCH.....	School Property Evaluation Program
CDL.....	Clandestine Drug Labs
Toxic Pits.....	Toxic Pits Cleanup Act Sites
CERS HAZ WASTE.....	CERS HAZ WASTE
US CDL.....	National Clandestine Laboratory Register
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

## EXECUTIVE SUMMARY

PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EML.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
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
CONTRA COSTA CO. SITE LIST.....	Site List
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)

### **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 leaking storage tank lists**

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

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

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>CEMEX CONSTRUCTION M</i></b>	<b><i>515 MITCHELL CANYON</i></b>	<b><i>SSW 1/4 - 1/2 (0.266 mi.)</i></b>	<b><i>4</i></b>	<b><i>11</i></b>
Database: LUST, Date of Government Version: 12/10/2018 Database: LUST REG 2, Date of Government Version: 09/30/2004 Status: Completed - Case Closed Facility Id: 07-0475 Facility Status: Case Closed Global Id: T0601300439 date9: 1/15/1997				
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>KAISER SAND &amp; GRAVEL</i></b>	<b><i>2484 PINE HOLLOW RD</i></b>	<b><i>NW 1/4 - 1/2 (0.461 mi.)</i></b>	<b><i>5</i></b>	<b><i>67</i></b>
Database: LUST, Date of Government Version: 12/10/2018 Database: LUST REG 2, Date of Government Version: 09/30/2004 Status: Completed - Case Closed Facility Id: 07-0595				

## EXECUTIVE SUMMARY

Facility Status: Case Closed  
Global Id: T0601300548  
date9: 3/26/1997

### 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 03/25/2019 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ZACK & KIKI TURNIN EPA ID:: CAC002994440	1205 AMARANTH DR	NW 1/8 - 1/4 (0.200 mi.)	1	8
MICHAEL SIBBITT EPA ID:: CAC002967480	890 COACHMAN PLACE	SE 1/8 - 1/4 (0.218 mi.)	2	9

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CEMEX CONSTRUCTION M</b> Reg Id: 07-0475	<b>515 MITCHELL CANYON</b>	<b>SSW 1/4 - 1/2 (0.266 mi.)</b>	<b>4</b>	<b>11</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAISER SAND &amp; GRAVEL</b> Reg Id: 07-0595	<b>2484 PINE HOLLOW RD</b>	<b>NW 1/4 - 1/2 (0.461 mi.)</b>	<b>5</b>	<b>67</b>

MINES: A listing of mine site locations from the Office of Mine Reclamation.

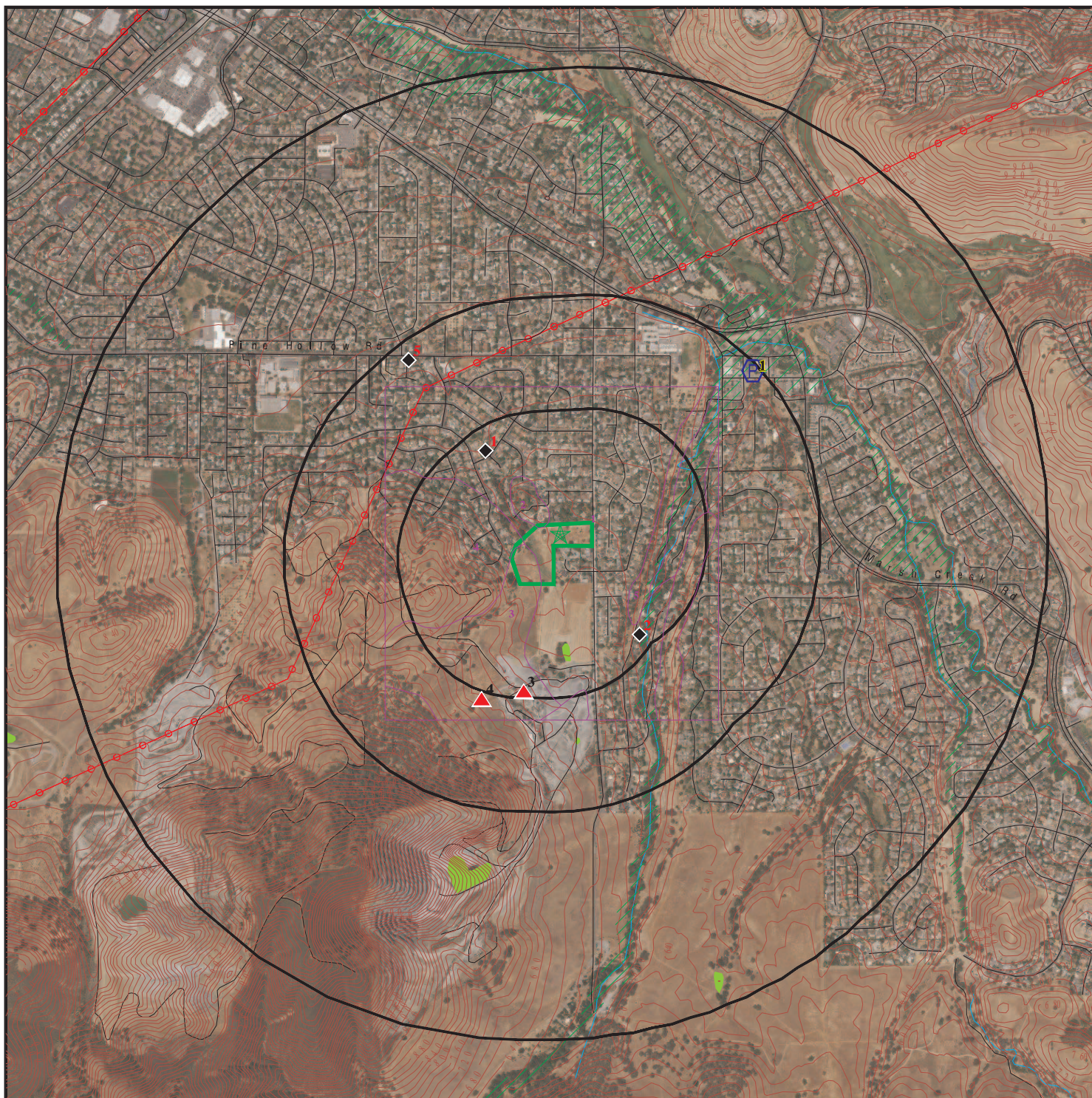
A review of the MINES list, as provided by EDR, and dated 12/10/2018 has revealed that there is 1 MINES site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CEMEX CLAYTON QUARRY	515 MITCHELL CANYON	SSW 1/8 - 1/4 (0.235 mi.)	3	10

## EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 5720065.2S



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

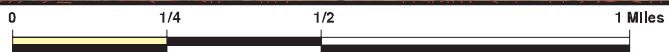
100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

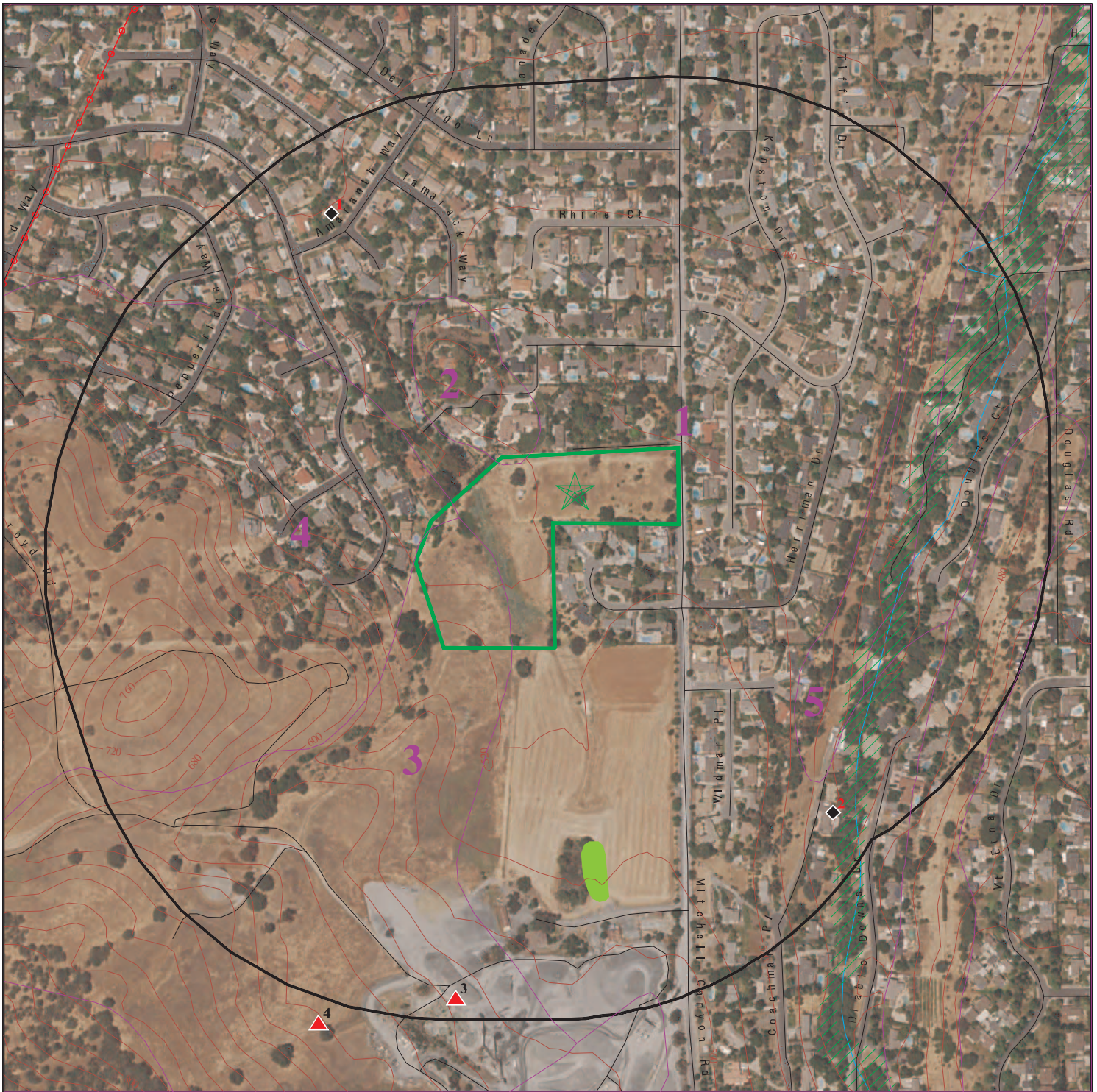


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 408841  
 ADDRESS: Mitchell Canyon Road  
 Clayton CA 94517  
 LAT/LONG: 37.935515 / 121.943254

CLIENT: AEI Consultants  
 CONTACT: Tony Chilesse  
 INQUIRY #: 5720065.2s  
 DATE: July 17, 2019 7:58 pm

# DETAIL MAP - 5720065.2S



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

Power transmission lines

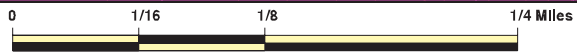
100-year flood zone

500-year flood zone

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: 408841  
 ADDRESS: Mitchell Canyon Road  
 Clayton CA 94517  
 LAT/LONG: 37.935515 / 121.943254

CLIENT: AEI Consultants  
 CONTACT: Tony Chilese  
 INQUIRY #: 5720065.2s  
 DATE: July 17, 2019 8:02 pm



## 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
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
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
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL RESPONSE</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i></b>								
ENVIROSTOR	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		0	0	2	NR	NR	2

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<b><i>State and tribal registered storage tank lists</i></b>								
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
<b><i>State and tribal voluntary cleanup sites</i></b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<b><i>State and tribal Brownfields sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
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
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
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
<b><i>Local Lists of Registered Storage Tanks</i></b>								
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
<b><i>Local Land Records</i></b>								
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
<b>Records of Emergency Release Reports</b>								
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
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	2	NR	NR	NR	2
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

1  
NW  
1/8-1/4  
0.200 mi.  
1057 ft.

**ZACK & KIKI TURNIN**  
**1205 AMARANTH DR**  
**CONCORD, CA 94521**

**RCRA NonGen / NLR**    **1024774518**  
**CAC002994440**

**Relative:**  
**Lower**  
**Actual:**  
**463 ft.**

RCRA NonGen / NLR:  
Date form received by agency: 12/27/2018  
Facility name: ZACK & KIKI TURNIN  
Facility address: 1205 AMARANTH DR  
CONCORD, CA 94521  
EPA ID: CAC002994440  
Contact: ZACK & KIKI TURNIN  
Contact address: 1205 AMARANTH DR  
CONCORD, CA 94521  
Contact country: Not reported  
Contact telephone: 925-914-1336  
Contact email: ELIZABETH.GARCIA@SYNERGYCOMPANIES.ORG  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:  
Owner/operator name: ZACK & KIKI TURNIN  
Owner/operator address: 1205 AMARANTH DR  
CONCORD, CA 94521  
Owner/operator country: Not reported  
Owner/operator telephone: 925-914-1336  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: ZACK & KIKI TURNIN  
Owner/operator address: 1205 AMARANTH DR  
CONCORD, CA 94521  
Owner/operator country: Not reported  
Owner/operator telephone: 925-914-1336  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:  
U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ZACK & KIKI TURNIN (Continued)**

1024774518

Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

2  
SE  
1/8-1/4  
0.218 mi.  
1150 ft.

**MICHAEL SIBBITT**  
**890 COACHMAN PLACE**  
**CLAYTON, CA 94517**

RCRA NonGen / NLR

1024747703  
CAC002967480

Relative:  
Lower

RCRA NonGen / NLR:

Actual:  
462 ft.

Date form received by agency: 06/20/2018  
Facility name: MICHAEL SIBBITT  
Facility address: 890 COACHMAN PLACE  
CLAYTON, CA 94517  
EPA ID: CAC002967480  
Contact: MICHAEL SIBBITT  
Contact address: 890 COACHMAN PLACE  
CLAYTON, CA 94517  
Contact country: Not reported  
Contact telephone: 925-323-8667  
Contact email: NICOLE@ENV-REM.COM  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: MICHAEL SIBBITT  
Owner/operator address: 890 COACHMAN PLACE  
CLAYTON, CA 94517  
Owner/operator country: Not reported  
Owner/operator telephone: 925-323-8667  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: MICHAEL SIBBITT  
Owner/operator address: 890 COACHMAN PLACE  
CLAYTON, CA 94517  
Owner/operator country: Not reported  
Owner/operator telephone: 925-323-8667  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MICHAEL SIBBITT (Continued)**

**1024747703**

Handler Activities Summary:

U.S. importer of hazardous waste: No  
 Mixed waste (haz. and radioactive): No  
 Recycler of hazardous waste: No  
 Transporter of hazardous waste: Yes  
 Treater, storer or disposer of HW: No  
 Underground injection activity: No  
 On-site burner exemption: No  
 Furnace exemption: No  
 Used oil fuel burner: No  
 Used oil processor: No  
 User oil refiner: No  
 Used oil fuel marketer to burner: No  
 Used oil Specification marketer: No  
 Used oil transfer facility: No  
 Used oil transporter: No

Violation Status: No violations found

**3**  
**SSW**  
**1/8-1/4**  
**0.235 mi.**  
**1242 ft.**

**CEMEX CLAYTON QUARRY**  
**515 MITCHELL CANYON ROAD**  
**, CA**

**MINES S117661278**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**595 ft.**

**MINES:**  
 Name: CEMEX CLAYTON QUARRY  
 Address: 515 MITCHELL CANYON ROAD  
 City, State, Zip: CA  
 Latitude: 37.930556  
 Longitude: -121.944722  
 Lead Agency identification code: 7  
 Lead Agency name: County of Contra Costa  
 Year of the operator supplied annual report: 2017  
 Type of report submitted by operator: 2  
 Number of acres disturbed by the mine: 130  
 Status of mining operation: ACTIVE  
 Status of mine reclamation: RECLAMATION IN PROGRESS  
 Mine operator: CEMEX CONSTRUCTION MATERIALS PACIFIC  
 Operator Address: 1764 SKYWAY  
 Operator City, State, Zip: CHICO, CA 95928  
 Operator County: Not reported  
 Mine owner: CEMEX  
 Owner Address: 5180 GOLDEN FOOTHILL PARKWAY, SUITE 220  
 Owner City, State, Zip: EL DORADO HILLS, CA 95762  
 Owner County: Not reported  
 Reclamation plan identification number: Not reported  
 Primary product produced by the mine: SAND AND GRAVEL  
 Other products produced by the mine: Not reported  
 Type of mining utilized by mine: PLANT OR MILL, QUARRY  
 Conditional use permit identification number: LUP2054-81  
 Number of acres permitted for mining disturbance: 437  
 Total amount of funds posted by the mine for reclamation: 4730408  
 Financial Assurance Cost Estimate for reclamation: 4730408

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

4  
SSW  
1/4-1/2  
0.266 mi.  
1404 ft.  
  
Relative:  
Higher  
  
Actual:  
643 ft.

**CEMEX CONSTRUCTION MATERIALS P**  
**515 MITCHELL CANYON RD**  
**CLAYTON, CA 94517**

**LUST S105023307**  
**AST N/A**  
**CERS HAZ WASTE**  
**SWEEPS UST**  
**CERS TANKS**  
**EMI**  
**HIST CORTESE**  
**NPDES**  
**CONTRA COSTA CO. SITE LIST**  
**CIWQS**  
**CERS**

LUST:

Name: RMC LONESTAR  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0601300439](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0601300439)  
Global Id: T0601300439  
Latitude: 37.932159  
Longitude: -121.940987  
Status: Completed - Case Closed  
Status Date: 01/15/1997  
Case Worker: KEB  
RB Case Number: 07-0475  
Local Agency: CONTRA COSTA COUNTY  
File Location: Not reported  
Local Case Number: 11077  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

LUST:

Global Id: T0601300439  
Contact Type: Regional Board Caseworker  
Contact Name: KEVIN BROWN  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: [kebrown@waterboards.ca.gov](mailto:kebrown@waterboards.ca.gov)  
Phone Number: Not reported

Global Id: T0601300439  
Contact Type: Local Agency Caseworker  
Contact Name: SUE LOYD  
Organization Name: CONTRA COSTA COUNTY  
Address: 4333 PACHECO BLVD.  
City: MARTINEZ  
Email: [sloyd@hsd.co.contra-costa.ca.us](mailto:sloyd@hsd.co.contra-costa.ca.us)  
Phone Number: Not reported

LUST:

Global Id: T0601300439  
Action Type: Other  
Date: 06/27/1990  
Action: Leak Discovery

Global Id: T0601300439



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Action Type: Other  
Date: 06/27/1990  
Action: Leak Stopped

Global Id: T0601300439  
Action Type: Other  
Date: 06/27/1990  
Action: Leak Reported

Global Id: T0601300439  
Action Type: ENFORCEMENT  
Date: 01/14/1996  
Action: 13267 Requirement

**LUST:**

Global Id: T0601300439  
Status: Completed - Case Closed  
Status Date: 01/15/1997

Global Id: T0601300439  
Status: Open - Case Begin Date  
Status Date: 06/27/1990

Global Id: T0601300439  
Status: Open - Site Assessment  
Status Date: 05/10/1994

**LUST REG 2:**

Region: 2  
Facility Id: 07-0475  
Facility Status: Case Closed  
Case Number: 11077  
How Discovered: Tank Closure  
Leak Cause: UNK  
Leak Source: UNK  
Date Leak Confirmed: 5/10/1994  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: Not reported  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**AST:**

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC LLC  
Address: 515 MITCHELL CANYON RD  
City/Zip: CLAYTON,  
Certified Unified Program Agencies: Contra Costa  
Owner: Not reported  
Total Gallons: 11,500  
CERSID: Not reported  
Facility ID: Not reported  
Business Name: Not reported  
Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Fax: Not reported  
Mailing Address: Not reported  
Mailing Address City: Not reported  
Mailing Address State: Not reported  
Mailing Address Zip Code: Not reported  
Operator Name: Not reported  
Operator Phone: Not reported  
Owner Phone: Not reported  
Owner Mail Address: Not reported  
Owner State: Not reported  
Owner Zip Code: Not reported  
Owner Country: Not reported  
Property Owner Name: Not reported  
Property Owner Phone: Not reported  
Property Owner Mailing Address: Not reported  
Property Owner City: Not reported  
Property Owner Stat : Not reported  
Property Owner Zip Code: Not reported  
Property Owner Country: Not reported  
EPAID: Not reported

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City/Zip: CLAYTON,94517  
Certified Unified Program Agencies: Not reported  
Owner: CEMEX Construction Materials Pacific, LLC  
Total Gallons: Not reported  
CERSID: 10005676  
Facility ID: 07-000-711077  
Business Name: CEMEX Construction Materials Pacific, LLC  
Phone: 925-672-4900  
Fax: 925-672-1845  
Mailing Address: 5180 Golden Foothill Parkway, Suite 200  
Mailing Address City: El Dorado Hills  
Mailing Address State: CA  
Mailing Address Zip Code: 95762  
Operator Name: CEMEX Construction Materials Pacific, LLC  
Operator Phone: 925-672-4900  
Owner Phone: 916-941-2800  
Owner Mail Address: 5180 Golden Foothill Parkway, Suite 200  
Owner State: CA  
Owner Zip Code: 95762  
Owner Country: United States  
Property Owner Name: CEMEX Construction Materials Pacific, LLC  
Property Owner Phone: 916-941-2800  
Property Owner Mailing Address: 5180 Golden Foothill Parkway, Suite 200  
Property Owner City: El Dorado Hills  
Property Owner Stat : CA  
Property Owner Zip Code: 95762  
Property Owner Country: United States  
EPAID: CAL000317868

**CERS HAZ WASTE:**

Site ID: 103985  
CERS ID: 10005676  
CERS Description: Hazardous Waste Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violations:

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SWPPP  
Violation Notes: SWPP does not include the truck wash station located just outside the entrance to the facility. In addition, the site map is out of date.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility?s discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple  
Violation Description: APSA Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: No BMPs for truck wash station: off site drainage of sediment material to Mitchell Canyon Road drainage ditch at 515 Mitchell Canyon Road, Clayton

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to implement the SPCC Plan.  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017. hsc25505(a)(2), hsc 25507  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections  
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility?s discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Evaluation:  
Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-28-2018  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: The site map is out of date and does not include all of the required elements of IGP section X.E and section X.H.

Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

**Enforcement Action:**

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Enf Action Program: HW  
Enf Action Source: CERS  
  
Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 02-05-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:

Site ID: 103985

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Facility Name: CEMEX  
Env Int Type Code: SMSWIND  
Program ID: 254432  
Coord Name: Not reported  
Ref Point Type Desc: Unknown  
Latitude: 37.933500  
Longitude: -121.941910

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator  
Entity Name: CEMEX  
Entity Title: Operator  
Affiliation Address: 2365 Iron Point Road Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Identification Signer  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Environmental Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Contra Costa County Health Services Department  
Entity Title: Not reported  
Affiliation Address: 4585 Pacheco Blvd Suite 100  
Affiliation City: Martinez  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94553  
Affiliation Phone: (925) 335-3200

Affiliation Type Desc: Document Preparer  
Entity Name: Erin Loza  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Operator  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (925) 672-4900

**SWEEPS UST:**

Name: RMC LONE STAR CLAYTON PLANT  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Status: Not reported  
Comp Number: 11077  
Number: Not reported  
Board Of Equalization: 44-002167  
Referral Date: Not reported  
Action Date: Not reported  
Created Date: Not reported  
Owner Tank Id: Not reported  
SWRCB Tank Id: 07-000-011077-000001  
Tank Status: Not reported  
Capacity: 10000  
Active Date: Not reported  
Tank Use: M.V. FUEL  
STG: PRODUCT  
Content: DIESEL  
Number Of Tanks: 3

Name: RMC LONE STAR CLAYTON PLANT  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Status: Not reported  
Comp Number: 11077  
Number: Not reported  
Board Of Equalization: 44-002167  
Referral Date: Not reported  
Action Date: Not reported  
Created Date: Not reported  
Owner Tank Id: Not reported  
SWRCB Tank Id: 07-000-011077-000002  
Tank Status: Not reported  
Capacity: 1000  
Active Date: Not reported  
Tank Use: OIL  
STG: WASTE  
Content: WASTE OIL  
Number Of Tanks: Not reported

Name: RMC LONE STAR CLAYTON PLANT  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Status: Not reported  
Comp Number: 11077  
Number: Not reported  
Board Of Equalization: 44-002167  
Referral Date: Not reported  
Action Date: Not reported  
Created Date: Not reported  
Owner Tank Id: Not reported  
SWRCB Tank Id: 07-000-011077-000003  
Tank Status: Not reported  
Capacity: 500  
Active Date: Not reported  
Tank Use: OIL  
STG: WASTE  
Content: WASTE OIL  
Number Of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

**CERS TANKS:**

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 103985  
CERS ID: 10005676  
CERS Description: Aboveground Petroleum Storage

**Violations:**

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SWPPP  
Violation Notes: SWPPP does not include the truck wash station located just outside the entrance to the facility. In addition, the site map is out of date.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple  
Violation Description: APSA Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: No BMPs for truck wash station: off site drainage of sediment material to Mitchell Canyon Road drainage ditch at 515 Mitchell Canyon Road, Clayton  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to implement the SPCC Plan.  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017. hsc25505(a)(2), hsc 25507  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HMRRP  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections  
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Evaluation:  
Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-28-2018  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: The site map is out of date and does not include all of the required elements of IGP section X.E and section X.H.  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Enforcement Action:  
Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 02-05-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:

Site ID: 103985  
Facility Name: CEMEX  
Env Int Type Code: SMSWIND  
Program ID: 254432  
Coord Name: Not reported  
Ref Point Type Desc: Unknown  
Latitude: 37.933500  
Longitude: -121.941910

Affiliation:

Affiliation Type Desc: Environmental Contact  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator  
Entity Name: CEMEX  
Entity Title: Operator  
Affiliation Address: 2365 Iron Point Road Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Affiliation Type Desc: Identification Signer  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Environmental Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Contra Costa County Health Services Department  
Entity Title: Not reported  
Affiliation Address: 4585 Pacheco Blvd Suite 100  
Affiliation City: Martinez  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94553  
Affiliation Phone: (925) 335-3200

Affiliation Type Desc: Document Preparer  
Entity Name: Erin Loza  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Operator  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Affiliation Zip: Not reported  
Affiliation Phone: (925) 672-4900

EMI:

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 1999  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1442  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 17  
Part. Matter 10 Micrometers and Smlr Tons/Yr:9

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2000  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1442  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 17  
Part. Matter 10 Micrometers and Smlr Tons/Yr:9

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2001  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1442  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Y  
Consolidated Emission Reporting Rule: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22  
Part. Matter 10 Micrometers and Smlr Tons/Yr:11

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2002  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22  
Part. Matter 10 Micrometers and Smlr Tons/Yr:11

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2003  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22  
Part. Matter 10 Micrometers and Smlr Tons/Yr:11

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2004  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.09  
Reactive Organic Gases Tons/Yr: 0.0794526  
Carbon Monoxide Emissions Tons/Yr: 0.176  
NOX - Oxides of Nitrogen Tons/Yr: 0.807  
SOX - Oxides of Sulphur Tons/Yr: 0.013  
Particulate Matter Tons/Yr: 22.963  
Part. Matter 10 Micrometers and Smlr Tons/Yr:11.3425397

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2005  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .028  
Reactive Organic Gases Tons/Yr: .0275772  
Carbon Monoxide Emissions Tons/Yr: .005  
NOX - Oxides of Nitrogen Tons/Yr: .021  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 26.619  
Part. Matter 10 Micrometers and Smlr Tons/Yr:13.1166714

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2006  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .097  
Reactive Organic Gases Tons/Yr: .0853095  
Carbon Monoxide Emissions Tons/Yr: .196  
NOX - Oxides of Nitrogen Tons/Yr: .903  
SOX - Oxides of Sulphur Tons/Yr: .014  
Particulate Matter Tons/Yr: 26.984  
Part. Matter 10 Micrometers and Smlr Tons/Yr:13.3291594

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2007  
County Code: 7  
Air Basin: SF



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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .097  
Reactive Organic Gases Tons/Yr: .0853095  
Carbon Monoxide Emissions Tons/Yr: .196  
NOX - Oxides of Nitrogen Tons/Yr: .903  
SOX - Oxides of Sulphur Tons/Yr: .014  
Particulate Matter Tons/Yr: 26.984  
Part. Matter 10 Micrometers and Smlr Tons/Yr:13.3291594

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2008  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .083  
Reactive Organic Gases Tons/Yr: .0735957  
Carbon Monoxide Emissions Tons/Yr: .153  
NOX - Oxides of Nitrogen Tons/Yr: .704  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 42.965  
Part. Matter 10 Micrometers and Smlr Tons/Yr:20.9233914

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2009  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 7.2999999999999995E-2  
Reactive Organic Gases Tons/Yr: 6.5228700000000001E-2  
Carbon Monoxide Emissions Tons/Yr: 0.14299999999999999  
NOX - Oxides of Nitrogen Tons/Yr: 0.65700000000000003  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22.151155737704901  
Part. Matter 10 Micrometers and Smlr Tons/Yr:10.9822554

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517

Map ID  
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Elevation

MAP FINDINGS

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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Year: 2010  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 6.500000000000002E-2  
Reactive Organic Gases Tons/Yr: 0.0585351  
Carbon Monoxide Emissions Tons/Yr: 0.11700000000000001  
NOX - Oxides of Nitrogen Tons/Yr: 0.54000000000000004  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 36.822959016393398  
Part. Matter 10 Micrometers and Smlr Tons/Yr:17.458028899999999

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2011  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.026  
Reactive Organic Gases Tons/Yr: 0.0259038  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2012  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.026  
Reactive Organic Gases Tons/Yr: 0.0259038  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 20.570060313  
Part. Matter 10 Micrometers and Smlr Tons/Yr:9.435

Map ID  
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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2013  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.026  
Reactive Organic Gases Tons/Yr: 0.026  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 21.046  
Part. Matter 10 Micrometers and Smlr Tons/Yr:10.523

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2014  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.02634999  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 18.464724282  
Part. Matter 10 Micrometers and Smlr Tons/Yr:9.232362244

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2015  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.01834999  
Reactive Organic Gases Tons/Yr: 0.01835  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0

Map ID  
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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Particulate Matter Tons/Yr: 16.365857189  
Part. Matter 10 Micrometers and Smlr Tons/Yr:8.182928511

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2016  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.018349992  
Reactive Organic Gases Tons/Yr: 0.018349992  
Carbon Monoxide Emissions Tons/Yr: Not reported  
NOX - Oxides of Nitrogen Tons/Yr: Not reported  
SOX - Oxides of Sulphur Tons/Yr: Not reported  
Particulate Matter Tons/Yr: 15.49322988  
Part. Matter 10 Micrometers and Smlr Tons/Yr:7.746615023

**HIST CORTESE:**

edr\_fname: RMC LONESTAR  
edr\_fadd1: 515 MITCHELL CNYN  
City,State,Zip: CLAYTON, CA 94517  
Region: CORTESE  
Facility County Code: 7  
Reg By: LTNKA  
Reg Id: 07-0475

**NPDES:**

Name: CLAYTON QUARRY  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Facility Status: Active  
NPDES Number: CAS000001  
Region: 2  
Agency Number: 0  
Regulatory Measure ID: 181849  
Place ID: Not reported  
Order Number: 97-03-DWQ  
WDID: 2 071009447  
Regulatory Measure Type: Enrollee  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 11/23/1992  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: 2365 Iron Point Road Suite 120  
Discharge Name: CEMEX  
Discharge City: Folsom  
Discharge State: California  
Discharge Zip: 95630  
Status: Not reported

Map ID  
Direction  
Distance  
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MAP FINDINGS

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Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
NPDES as of 03/2018:	
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	2
Regulatory Measure ID:	181849
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 07I009447
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/23/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	CEMEX
Discharge Address:	2365 Iron Point Road Suite 120
Discharge City:	Folsom
Discharge State:	California
Discharge Zip:	95630
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported

Map ID  
Direction  
Distance  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	181849
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 07I009447
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	11/23/1992
Status:	Active
Status Date:	11/23/1992
Place Size:	217
Place Size Unit:	Acres
Contact:	Ramon Neilson
Contact Title:	Plant Manager
Contact Phone:	559-471-5581
Contact Phone Ext:	Not reported
Contact Email:	ramon.neilson@cemex.com
Operator Name:	CEMEX

Map ID  
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MAP FINDINGS

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Database(s)

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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Operator Address: 5180 Golden Foothill Parkway  
Operator City: El Dorado Hills  
Operator State: California  
Operator Zip: 95762  
Operator Contact: Bruce Eppler  
Operator Contact Title: Environmental Manager  
Operator Contact Phone: 916-941-2920  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: bruceh.eppler@cemex.com  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Stormwater to Suisun Bay  
Certifier: Brian Mastin  
Certifier Title: VP OF OPERATIVE SUPPORT  
Certification Date: 31-AUG-15  
Primary Sic: 1442-Construction Sand and Gravel  
Secondary Sic: 1429-Crushed and Broken Stone, NEC  
Tertiary Sic: Not reported

Name: CLAYTON QUARRY  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 2 071009447

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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Active  
Status Date: 11/23/1992  
Operator Name: CEMEX  
Operator Address: 2365 Iron Point Road Suite 120  
Operator City: Folsom  
Operator State: California  
Operator Zip: 95630

NPDES as of 03/2018:  
NPDES Number: CAS000001  
Status: Active  
Agency Number: 0  
Region: 2  
Regulatory Measure ID: 181849  
Order Number: 97-03-DWQ  
Regulatory Measure Type: Enrollee  
Place ID: Not reported  
WDID: 2 07I009447  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 11/23/1992  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: CEMEX  
Discharge Address: 2365 Iron Point Road Suite 120  
Discharge City: Folsom  
Discharge State: California  
Discharge Zip: 95630  
Received Date: Not reported  
Processed Date: Not reported  
Status: Not reported  
Status Date: Not reported  
Place Size: Not reported  
Place Size Unit: Not reported  
Contact: Not reported  
Contact Title: Not reported  
Contact Phone: Not reported  
Contact Phone Ext: Not reported  
Contact Email: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported  
Operator Contact: Not reported  
Operator Contact Title: Not reported  
Operator Contact Phone: Not reported



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**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	181849
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 07I009447
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Received Date: 05/09/2008  
Processed Date: 11/23/1992  
Status: Active  
Status Date: 11/23/1992  
Place Size: 217  
Place Size Unit: Acres  
Contact: Ramon Neilson  
Contact Title: Plant Manager  
Contact Phone: 559-471-5581  
Contact Phone Ext: Not reported  
Contact Email: ramon.neilson@cemex.com  
Operator Name: CEMEX  
Operator Address: 5180 Golden Foothill Parkway  
Operator City: El Dorado Hills  
Operator State: California  
Operator Zip: 95762  
Operator Contact: Bruce Eppler  
Operator Contact Title: Environmental Manager  
Operator Contact Phone: 916-941-2920  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: bruceh.eppler@cemex.com  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Stormwater to Suisun Bay  
Certifier: Brian Mastin  
Certifier Title: VP OF OPERATIVE SUPPORT  
Certification Date: 31-AUG-15  
Primary Sic: 1442-Construction Sand and Gravel  
Secondary Sic: 1429-Crushed and Broken Stone, NEC  
Tertiary Sic: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

CONTRA COSTA CO. SITE LIST:

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: INACTIVE, NON-BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: UNDERGROUND STORAGE TANK SITE  
Region: CONTRA COSTA  
Cupa Number: 711077

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: ACTIVE, BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: APSA: 10K - <100K GALLONS  
Region: CONTRA COSTA  
Cupa Number: 711077

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: ACTIVE, BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: HMBP: >100K-250K LBS, 0-19 EMPLOYEES  
Region: CONTRA COSTA  
Cupa Number: 711077

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: ACTIVE, BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: HWG: LESS THAN 5 TONS/YEAR  
Region: CONTRA COSTA  
Cupa Number: 711077

CIWQS:

Name: CLAYTON QUARRY  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Agency: CEMEX  
Agency Address: 2365 Iron Point Road Suite 120, Folsom, CA 95630  
Place/Project Type: Industrial - Construction Sand and Gravel  
SIC/NAICS: Multiple  
Region: 2  
Program: INDSTW  
Regulatory Measure Status: Active  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 2 07I009447  
NPDES Number: CAS000001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Adoption Date: Not reported  
Effective Date: 11/23/1992  
Termination Date: Not reported  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 2  
Latitude: 37.9335  
Longitude: -121.94191

**CERS:**

Name: CEMEX - CLAYTON QUARRY  
Address: 515 MITCHELL CANYON ROAD  
City,State,Zip: CLAYTON, CA 94517-1529  
Site ID: 458437  
CERS ID: 110005972956  
CERS Description: US EPA Air Emission Inventory System (EIS)

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: Bruce Eppler  
Entity Title: Not reported  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAYNA SUITE 200  
Affiliation City: ELDORADOHILLS  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: GORDON BROWN  
Entity Title: OPERATIONS MANAGER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: RAMON NEILSON  
Entity Title: PLANT MANAGER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: ROBERT ALDENHUYSEN  
Entity Title: ENVIRONMENTAL CONTACT  
Affiliation Address: POBOX 697  
Affiliation City: PLEASANTON

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: CEMEX CONSTRCTN MATL PACIFIC LLC  
Entity Title: OPERATOR  
Affiliation Address: POBOX 697  
Affiliation City: PLEASANTON  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: LOUIS B SCHIPPER  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: CEMEX CONSTRCTN MATL PACIFICNA LLC  
Entity Title: Not reported  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAYNA SUITE 200  
Affiliation City: ELDORADOHILLS  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: RICK HANCOCK  
Entity Title: PLANT MANAGER  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAY  
Affiliation City: ELDORADOHILLS  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Owner  
Entity Name: CEMEX CONSTUCTION MATL PACIFIC LLC  
Entity Title: OWNER  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAY  
Affiliation City: ELDORADOHILLS  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: RMC LONESTAR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 215748  
CERS ID: T0601300439  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: SUE LOYD - CONTRA COSTA COUNTY  
Entity Title: Not reported  
Affiliation Address: 4333 PACHECO BLVD.  
Affiliation City: MARTINEZ  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: KEVIN BROWN - SAN FRANCISCO BAY RWQCB (REGION 2)  
Entity Title: Not reported  
Affiliation Address: 1515 CLAY STREET, SUITE 1400  
Affiliation City: OAKLAND  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 103985  
CERS ID: 254432  
CERS Description: Industrial Facility Storm Water

**Violations:**

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SWPPP  
Violation Notes: SWPP does not include the truck wash station located just outside the entrance to the facility. In addition, the site map is out of date.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility?s discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple  
Violation Description: APSA Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: No BMPs for truck wash station: off site drainage of sediment material to Mitchell Canyon Road drainage ditch at 515 Mitchell Canyon Road, Clayton  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to implement the SPCC Plan.  
Violation Notes: Returned to compliance on 01/04/2017.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017. hsc25505(a)(2), hsc 25507  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections  
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)

Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)

Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Evaluation:  
Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-28-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-28-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-05-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-05-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-28-2018
Violations Found:	No
Eval Type:	Industrial Storm Water Compliance Evaluation
Eval Notes:	The site map is out of date and does not include all of the required elements of IGP section X.E and section X.H.
Eval Division:	Water Boards
Eval Program:	INDSTW
Eval Source:	SMARTS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-17-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

**Enforcement Action:**

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 02-05-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS  
  
Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

**Coordinates:**

Site ID: 103985  
Facility Name: CEMEX  
Env Int Type Code: SMSWIND  
Program ID: 254432  
Coord Name: Not reported  
Ref Point Type Desc: Unknown  
Latitude: 37.933500  
Longitude: -121.941910

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator  
Entity Name: CEMEX  
Entity Title: Operator  
Affiliation Address: 2365 Iron Point Road Suite 120

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Identification Signer  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Environmental Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Contra Costa County Health Services Department  
Entity Title: Not reported  
Affiliation Address: 4585 Pacheco Blvd Suite 100  
Affiliation City: Martinez  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94553  
Affiliation Phone: (925) 335-3200

Affiliation Type Desc: Document Preparer  
Entity Name: Erin Loza  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Operator  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (925) 672-4900

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 103985  
CERS ID: 10005676  
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SWPPP  
Violation Notes: SWPPP does not include the truck wash station located just outside the entrance to the facility. In addition, the site map is out of date.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple  
Violation Description: APSA Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: No BMPs for truck wash station: off site drainage of sediment material to Mitchell Canyon Road drainage ditch at 515 Mitchell Canyon Road, Clayton  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Description: Failure to implement the SPCC Plan.  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple

Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017. hsc25505(a)(2), hsc 25507  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections

Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)

Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Violation Notes: a Tier I qualified facility SPCC Plan.  
Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility?s discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.

Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Evaluation:  
Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-28-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-28-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-05-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-05-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-28-2018
Violations Found:	No
Eval Type:	Industrial Storm Water Compliance Evaluation
Eval Notes:	The site map is out of date and does not include all of the required elements of IGP section X.E and section X.H.
Eval Division:	Water Boards
Eval Program:	INDSTW
Eval Source:	SMARTS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-17-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Eval Program: HMRRP  
Eval Source: CERS  
  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Enforcement Action:  
Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 02-05-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:  
Site ID: 103985  
Facility Name: CEMEX  
Env Int Type Code: SMSWIND  
Program ID: 254432  
Coord Name: Not reported  
Ref Point Type Desc: Unknown  
Latitude: 37.933500  
Longitude: -121.941910

Affiliation:  
Affiliation Type Desc: Environmental Contact  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Entity Name: CEMEX  
Entity Title: Operator  
Affiliation Address: 2365 Iron Point Road Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Identification Signer  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Environmental Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Contra Costa County Health Services Department  
Entity Title: Not reported  
Affiliation Address: 4585 Pacheco Blvd Suite 100  
Affiliation City: Martinez  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94553  
Affiliation Phone: (925) 335-3200

Affiliation Type Desc: Document Preparer  
Entity Name: Erin Loza  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CEMEX CONSTRUCTION MATERIALS P (Continued)**

**S105023307**

Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
 Entity Name: Mailing Address  
 Entity Title: Not reported  
 Affiliation Address: 2365 Iron Point Road, Suite 120  
 Affiliation City: Folsom  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95630  
 Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
 Entity Name: Cemex Construction Materials Pacific, LLC  
 Entity Title: Not reported  
 Affiliation Address: 2365 Iron Point Road, Suite 120  
 Affiliation City: Folsom  
 Affiliation State: CA  
 Affiliation Country: United States  
 Affiliation Zip: 95630  
 Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Operator  
 Entity Name: Cemex Construction Materials Pacific, LLC  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: (925) 672-4900

**5  
 NW  
 1/4-1/2  
 0.461 mi.  
 2433 ft.**

**KAISER SAND & GRAVEL  
 2484 PINE HOLLOW RD  
 CLAYTON, CA 94517**

**LUST 1000727398  
 HIST CORTESE N/A  
 CERS**

**Relative:  
 Lower  
 Actual:  
 434 ft.**

**LUST:**  
 Name: KAISER SAND & GRAVEL  
 Address: 2484 PINE HOLLOW RD  
 City, State, Zip: CLAYTON, CA 94517  
 Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0601300548](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0601300548)  
 Global Id: T0601300548  
 Latitude: 37.9411  
 Longitude: -121.94935  
 Status: Completed - Case Closed  
 Status Date: 03/26/1997  
 Case Worker: KEB  
 RB Case Number: 07-0595  
 Local Agency: CONTRA COSTA COUNTY  
 File Location: Not reported  
 Local Case Number: 02247  
 Potential Media Affect: Soil  
 Potential Contaminants of Concern: Diesel



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER SAND & GRAVEL (Continued)**

**1000727398**

Site History: Not reported

LUST:  
Global Id: T0601300548  
Contact Type: Regional Board Caseworker  
Contact Name: KEVIN BROWN  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: kebrown@waterboards.ca.gov  
Phone Number: Not reported

Global Id: T0601300548  
Contact Type: Local Agency Caseworker  
Contact Name: SUE LOYD  
Organization Name: CONTRA COSTA COUNTY  
Address: 4333 PACHECO BLVD.  
City: MARTINEZ  
Email: sloyd@hsd.co.contra-costa.ca.us  
Phone Number: Not reported

LUST:  
Global Id: T0601300548  
Action Type: Other  
Date: 11/19/1985  
Action: Leak Stopped

Global Id: T0601300548  
Action Type: Other  
Date: 11/19/1985  
Action: Leak Reported

Global Id: T0601300548  
Action Type: ENFORCEMENT  
Date: 03/26/1997  
Action: Closure/No Further Action Letter

Global Id: T0601300548  
Action Type: Other  
Date: 11/19/1985  
Action: Leak Discovery

LUST:  
Global Id: T0601300548  
Status: Completed - Case Closed  
Status Date: 03/26/1997

Global Id: T0601300548  
Status: Open - Case Begin Date  
Status Date: 11/19/1985

Global Id: T0601300548  
Status: Open - Site Assessment  
Status Date: 08/01/1994

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER SAND & GRAVEL (Continued)**

**1000727398**

LUST REG 2:

Region: 2  
Facility Id: 07-0595  
Facility Status: Case Closed  
Case Number: 02247  
How Discovered: Tank Closure  
Leak Cause: UNK  
Leak Source: UNK  
Date Leak Confirmed: 8/1/1994  
Oversight Program: LUST  
Prelim. Site Assessment Wokplan Submitted: Not reported  
Preliminary Site Assessment Began: Not reported  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

HIST CORTESE:

edr\_fname: KAISER SAND & GRAVEL  
edr\_fadd1: 2484 PINE HOLLOW  
City,State,Zip: CLAYTON, CA 94517  
Region: CORTESE  
Facility County Code: 7  
Reg By: LTNKA  
Reg Id: 07-0595

CERS:

Name: KAISER SAND & GRAVEL  
Address: 2484 PINE HOLLOW RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 257971  
CERS ID: T0601300548  
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: SUE LOYD - CONTRA COSTA COUNTY  
Entity Title: Not reported  
Affiliation Address: 4333 PACHECO BLVD.  
Affiliation City: MARTINEZ  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: KEVIN BROWN - SAN FRANCISCO BAY RWQCB (REGION 2)  
Entity Title: Not reported  
Affiliation Address: 1515 CLAY STREET, SUITE 1400  
Affiliation City: OAKLAND  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **STANDARD ENVIRONMENTAL RECORDS**

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: N/A
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 07/02/2019
Number of Days to Update: 26	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: N/A
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 07/02/2019
Number of Days to Update: 26	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/11/2019  
Date Data Arrived at EDR: 04/18/2019  
Date Made Active in Reports: 05/14/2019  
Number of Days to Update: 26

Source: EPA  
Telephone: N/A  
Last EDR Contact: 07/02/2019  
Next Scheduled EDR Contact: 10/14/2019  
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: 07/03/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/11/2019  
Date Data Arrived at EDR: 04/18/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 35

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 07/02/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: 800-424-9346
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 07/02/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019	Source: EPA
Date Data Arrived at EDR: 03/27/2019	Telephone: 800-424-9346
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019	Source: Department of the Navy
Date Data Arrived at EDR: 03/07/2019	Telephone: 843-820-7326
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 05/10/2019
Number of Days to Update: 41	Next Scheduled EDR Contact: 08/26/2019
	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: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 05/29/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 05/29/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

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

Date of Government Version: 03/25/2019

Date Data Arrived at EDR: 03/26/2019

Date Made Active in Reports: 05/01/2019

Number of Days to Update: 36

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/29/2019

Date Data Arrived at EDR: 04/30/2019

Date Made Active in Reports: 06/27/2019

Number of Days to Update: 58

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/30/2019

Next Scheduled EDR Contact: 08/12/2019

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/29/2019

Date Data Arrived at EDR: 04/30/2019

Date Made Active in Reports: 06/27/2019

Number of Days to Update: 58

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/30/2019

Next Scheduled EDR Contact: 08/12/2019

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: 02/11/2019

Date Data Arrived at EDR: 02/12/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 21

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 05/14/2019

Next Scheduled EDR Contact: 08/26/2019

Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	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 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	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

## LUST REG 1: Active Toxic Site Investigation

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

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-6769
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 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	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	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	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	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

## 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: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: see region list
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Quarterly

## 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: 10/10/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/08/2019	Telephone: 415-972-3372
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/24/2018  
Date Data Arrived at EDR: 03/12/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 50

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 04/26/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

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

Date of Government Version: 10/17/2018  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 55

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 04/26/2019  
Next Scheduled EDR Contact: 08/05/2019  
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: 11/01/2018  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 55

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 04/26/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/19/2019  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 55

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 04/26/2019  
Next Scheduled EDR Contact: 08/05/2019  
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: 10/16/2018  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 55

Source: EPA Region 8  
Telephone: 303-312-6271  
Last EDR Contact: 04/26/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land  
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2018  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 55

Source: EPA, Region 5  
Telephone: 312-886-7439  
Last EDR Contact: 04/26/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/13/2018  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 55

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 04/26/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Varies

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	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	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	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	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	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	Source: Region Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 11/18/2004	Telephone: 213-576-6600
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 07/01/2011
Number of Days to Update: 47	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	Source: Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 04/05/2005	Telephone: 916-464-3291
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: No Update Planned

## ***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: 05/15/2017  
Date Data Arrived at EDR: 05/30/2017  
Date Made Active in Reports: 10/13/2017  
Number of Days to Update: 136

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 07/10/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

Date of Government Version: 03/11/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/13/2019	Telephone: 916-327-7844
Date Made Active in Reports: 04/03/2019	Last EDR Contact: 06/12/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Varies

## UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/10/2018	Source: SWRCB
Date Data Arrived at EDR: 12/11/2018	Telephone: 916-341-5851
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Semi-Annually

## MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	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: 06/17/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 09/30/2019
	Data Release Frequency: Varies

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/03/2018	Source: EPA, Region 1
Date Data Arrived at EDR: 03/07/2019	Telephone: 617-918-1313
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	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: 09/24/2018	Source: EPA Region 4
Date Data Arrived at EDR: 03/12/2019	Telephone: 404-562-9424
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 10/12/2018	Source: EPA Region 5
Date Data Arrived at EDR: 03/07/2019	Telephone: 312-886-6136
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	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: 11/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 03/07/2019	Telephone: 214-665-7591
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	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: 11/07/2018	Source: EPA Region 7
Date Data Arrived at EDR: 03/07/2019	Telephone: 913-551-7003
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	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: 10/16/2018	Source: EPA Region 8
Date Data Arrived at EDR: 03/07/2019	Telephone: 303-312-6137
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	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: 10/10/2018	Source: EPA Region 9
Date Data Arrived at EDR: 03/08/2019	Telephone: 415-972-3368
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/17/2018	Source: EPA Region 10
Date Data Arrived at EDR: 03/07/2019	Telephone: 206-553-2857
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

### ***State and tribal voluntary cleanup sites***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN VCP R1: Voluntary Cleanup Priority Listing

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

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/20/2019
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Varies

## VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 04/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/30/2019	Telephone: 916-323-3400
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 04/30/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 08/12/2019
	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	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	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: 03/25/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/26/2019	Telephone: 916-323-7905
Date Made Active in Reports: 04/29/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/07/2019
	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: 12/17/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/18/2018	Telephone: 202-566-2777
Date Made Active in Reports: 01/11/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 24	Next Scheduled EDR Contact: 09/30/2019
	Data Release Frequency: Semi-Annually

### ***Local Lists of Landfill / Solid Waste Disposal Sites***



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## WMUDS/SWAT: Waste Management Unit Database

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

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 04/25/2019
Number of Days to Update: 30	Next Scheduled EDR Contact: 08/12/2019
	Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/11/2019	Source: Department of Conservation
Date Data Arrived at EDR: 03/13/2019	Telephone: 916-323-3836
Date Made Active in Reports: 04/30/2019	Last EDR Contact: 06/12/2019
Number of Days to Update: 48	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 03/27/2019	Telephone: 916-341-6422
Date Made Active in Reports: 04/30/2019	Last EDR Contact: 05/09/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/26/2019
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 04/26/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/12/2019
	Data Release Frequency: Varies

## ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

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

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 04/22/2019
Number of Days to Update: 137	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 04/23/2019
Number of Days to Update: 176	Next Scheduled EDR Contact: 08/12/2019
	Data Release Frequency: Varies

## Local Lists of Hazardous waste / Contaminated Sites

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/26/2019	Telephone: 202-307-1000
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 05/24/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: No Update Planned

### HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

### SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/30/2019	Telephone: 916-323-3400
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 04/30/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 08/12/2019
	Data Release Frequency: Quarterly

### CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/12/2018	Telephone: 916-255-6504
Date Made Active in Reports: 08/06/2018	Last EDR Contact: 07/08/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/21/2019
	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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/09/2019	Source: CalEPA
Date Data Arrived at EDR: 04/11/2019	Telephone: 916-323-2514
Date Made Active in Reports: 05/08/2019	Last EDR Contact: 04/11/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Quarterly

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/26/2019	Telephone: 202-307-1000
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 05/24/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Quarterly

## PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/21/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 02/22/2019	Telephone: 866-480-1028
Date Made Active in Reports: 04/15/2019	Last EDR Contact: 06/28/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 09/23/2019
	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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018	Source: Department of Public Health
Date Data Arrived at EDR: 12/06/2018	Telephone: 707-463-4466
Date Made Active in Reports: 12/14/2018	Last EDR Contact: 05/24/2019
Number of Days to Update: 8	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Annually

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 09/11/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/11/2018  
Number of Days to Update: 29

Source: San Francisco County Department of Public Health  
Telephone: 415-252-3896  
Last EDR Contact: 05/02/2019  
Next Scheduled EDR Contact: 08/19/2019  
Data Release Frequency: Varies

## CA FID UST: Facility Inventory Database

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

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/09/2019  
Date Data Arrived at EDR: 04/11/2019  
Date Made Active in Reports: 05/08/2019  
Number of Days to Update: 27

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 04/11/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Quarterly

## Local Land Records

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/28/2019  
Date Data Arrived at EDR: 03/01/2019  
Date Made Active in Reports: 04/02/2019  
Number of Days to Update: 32

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/11/2019  
Date Data Arrived at EDR: 04/18/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 35

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 07/02/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Semi-Annually

### DEED: Deed Restriction Listing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Date of Government Version: 03/04/2019	Source: DTSC and SWRCB
Date Data Arrived at EDR: 03/05/2019	Telephone: 916-323-3400
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/16/2019
	Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### **HMIRS: Hazardous Materials Information Reporting System**

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

Date of Government Version: 03/25/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 10/07/2019
	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: 10/24/2018	Source: Office of Emergency Services
Date Data Arrived at EDR: 01/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 06/24/2019
Number of Days to Update: 40	Next Scheduled EDR Contact: 08/05/2019
	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: 12/10/2018	Source: State Water Quality Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	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: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	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: 03/07/2019	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 04/03/2019	Telephone: 202-528-4285
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 05/21/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/02/2019
	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	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/09/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/21/2019
	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: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/10/2019
Number of Days to Update: 339	Next Scheduled EDR Contact: 10/21/2019
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 05/13/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 08/26/2019
	Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/26/2019	Telephone: 202-566-1917
Date Made Active in Reports: 05/07/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	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: 05/06/2019
Number of Days to Update: 88	Next Scheduled EDR Contact: 08/19/2019
	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: 05/10/2019
Number of Days to Update: 73	Next Scheduled EDR Contact: 08/19/2019
	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: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 06/18/2019
Number of Days to Update: 198	Next Scheduled EDR Contact: 09/30/2019
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 01/10/2018  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 2

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 05/24/2019  
Next Scheduled EDR Contact: 09/02/2019  
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: 12/31/2009  
Date Data Arrived at EDR: 12/10/2010  
Date Made Active in Reports: 02/25/2011  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 04/24/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Annually

## ROD: Records Of Decision

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

Date of Government Version: 04/11/2019  
Date Data Arrived at EDR: 04/18/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 35

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 07/01/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019  
Date Data Arrived at EDR: 05/02/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 21

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: 202-564-6023
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 07/01/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/19/2019
	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: 03/20/2019	Source: EPA
Date Data Arrived at EDR: 04/10/2019	Telephone: 202-566-0500
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 07/12/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	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: 07/03/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/21/2019
	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: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 04/22/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 06/07/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 09/16/2019
	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: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/07/2019
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/16/2019
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 04/26/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 08/05/2019
	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: 04/02/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/02/2019	Telephone: 202-343-9775
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 07/01/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 10/14/2019
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018  
Date Data Arrived at EDR: 01/29/2019  
Date Made Active in Reports: 03/21/2019  
Number of Days to Update: 51

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 04/30/2019  
Next Scheduled EDR Contact: 08/12/2019  
Data Release Frequency: Quarterly

## CONSENT: Superfund (CERCLA) Consent Decrees

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

Date of Government Version: 03/31/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 30

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 07/08/2019  
Next Scheduled EDR Contact: 10/21/2019  
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: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 06/26/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

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

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 07/10/2019  
Next Scheduled EDR Contact: 10/21/2019  
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: 05/02/2019  
Next Scheduled EDR Contact: 08/19/2019  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017  
Date Data Arrived at EDR: 10/11/2017  
Date Made Active in Reports: 11/03/2017  
Number of Days to Update: 23

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 05/24/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/11/2019  
Date Data Arrived at EDR: 04/18/2019  
Date Made Active in Reports: 05/14/2019  
Number of Days to Update: 26

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 07/01/2019  
Next Scheduled EDR Contact: 10/14/2019  
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

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

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

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

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

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

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

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018  
Date Data Arrived at EDR: 02/27/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 05/29/2019  
Next Scheduled EDR Contact: 09/09/2019  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 05/31/2019  
Next Scheduled EDR Contact: 09/09/2019  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 05/31/2019  
Next Scheduled EDR Contact: 09/09/2019  
Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/27/2019  
Date Data Arrived at EDR: 03/28/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 34

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 06/19/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

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

Date of Government Version: 02/15/2019  
Date Data Arrived at EDR: 03/05/2019  
Date Made Active in Reports: 03/15/2019  
Number of Days to Update: 10

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 06/05/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Quarterly

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 01/17/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 74

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
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: 04/07/2019  
Date Data Arrived at EDR: 04/09/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 44

Source: Environmental Protection Agency  
Telephone: 202-564-2280  
Last EDR Contact: 07/09/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

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

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 05/24/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019	Source: EPA
Date Data Arrived at EDR: 02/21/2019	Telephone: 800-385-6164
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 05/21/2019
Number of Days to Update: 39	Next Scheduled EDR Contact: 09/02/2019
	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	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/25/2019	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 03/26/2019	Telephone: 916-323-3400
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 04/18/2019	Source: San Francisco County Department of Environmental Health
Date Data Arrived at EDR: 04/19/2019	Telephone: 415-252-3896
Date Made Active in Reports: 04/30/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 11	Next Scheduled EDR Contact: 08/19/2019
	Data Release Frequency: Varies

## CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 01/23/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 02/26/2019	Telephone: 925-454-2361
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 05/14/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/26/2019
	Data Release Frequency: Varies

## DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/27/2019  
Date Data Arrived at EDR: 02/28/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 32

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 09/16/2019  
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: 03/19/2019  
Date Data Arrived at EDR: 03/22/2019  
Date Made Active in Reports: 04/09/2019  
Number of Days to Update: 18

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 05/23/2019  
Next Scheduled EDR Contact: 09/09/2019  
Data Release Frequency: Varies

**DRYCLEANERS:** Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/01/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 35

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Annually

**EMI:** Emissions Inventory Data

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

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/20/2018  
Date Made Active in Reports: 08/06/2018  
Number of Days to Update: 47

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 06/24/2019  
Next Scheduled EDR Contact: 09/30/2019  
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: 11/01/2018  
Date Data Arrived at EDR: 11/02/2018  
Date Made Active in Reports: 12/13/2018  
Number of Days to Update: 41

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 05/14/2019  
Next Scheduled EDR Contact: 08/26/2019  
Data Release Frequency: Varies

**Financial Assurance 1:** Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/22/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 06/26/2019  
Number of Days to Update: 64

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/15/2019  
Date Data Arrived at EDR: 02/19/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 14

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 05/09/2019  
Next Scheduled EDR Contact: 08/26/2019  
Data Release Frequency: Varies

## HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 04/09/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 50

Source: California Environmental Protection Agency  
Telephone: 916-255-1136  
Last EDR Contact: 07/12/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Annually

## ICE: ICE

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

Date of Government Version: 02/19/2019  
Date Data Arrived at EDR: 02/20/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 13

Source: Department of Toxic Substances Control  
Telephone: 877-786-9427  
Last EDR Contact: 05/21/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

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

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

## HWP: EnviroStor Permitted Facilities Listing

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

Date of Government Version: 02/19/2019  
Date Data Arrived at EDR: 02/20/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 13

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 05/21/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: Quarterly

## HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/08/2019  
Date Data Arrived at EDR: 04/09/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 51

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145  
Last EDR Contact: 07/09/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/10/2018	Source: Department of Conservation
Date Data Arrived at EDR: 12/12/2018	Telephone: 916-322-1080
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Quarterly

## MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/20/2019	Source: Department of Public Health
Date Data Arrived at EDR: 03/05/2019	Telephone: 916-558-1784
Date Made Active in Reports: 04/02/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 28	Next Scheduled EDR Contact: 09/16/2019
	Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/11/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 02/12/2019	Telephone: 916-445-9379
Date Made Active in Reports: 03/07/2019	Last EDR Contact: 05/14/2019
Number of Days to Update: 23	Next Scheduled EDR Contact: 08/26/2019
	Data Release Frequency: Quarterly

## PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/04/2019	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 03/05/2019	Telephone: 916-445-4038
Date Made Active in Reports: 04/05/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 31	Next Scheduled EDR Contact: 09/16/2019
	Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/11/2019	Source: Department of Conservation
Date Data Arrived at EDR: 03/13/2019	Telephone: 916-323-3836
Date Made Active in Reports: 04/29/2019	Last EDR Contact: 06/12/2019
Number of Days to Update: 47	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/18/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/19/2019	Telephone: 916-445-3846
Date Made Active in Reports: 04/29/2019	Last EDR Contact: 06/17/2019
Number of Days to Update: 41	Next Scheduled EDR Contact: 09/30/2019
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018	Source: Department of Conservation
Date Data Arrived at EDR: 06/13/2018	Telephone: 916-445-2408
Date Made Active in Reports: 07/17/2018	Last EDR Contact: 06/11/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Varies

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 12/10/2018	Source: State Water Resource Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/11/2018	Telephone: 559-445-5577
Date Made Active in Reports: 09/13/2018	Last EDR Contact: 07/12/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/21/2019
	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: 05/16/2019
Number of Days to Update: 9	Next Scheduled EDR Contact: 09/02/2019
	Data Release Frequency: No Update Planned

## WIP: Well Investigation Program Case List

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

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 06/19/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: No Update Planned

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 06/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Varies

## PROJECT: Project Sites (GEOTRACKER)

Projects sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/10/2018  
Date Data Arrived at EDR: 12/11/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 06/11/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Varies

## WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/11/2019  
Date Data Arrived at EDR: 03/13/2019  
Date Made Active in Reports: 04/29/2019  
Number of Days to Update: 47

Source: State Water Resources Control Board  
Telephone: 916-341-5810  
Last EDR Contact: 06/12/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Quarterly

## CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2019  
Date Data Arrived at EDR: 03/05/2019  
Date Made Active in Reports: 04/02/2019  
Number of Days to Update: 28

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 06/04/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Varies

## CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/09/2019  
Date Data Arrived at EDR: 04/11/2019  
Date Made Active in Reports: 05/08/2019  
Number of Days to Update: 27

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 04/11/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

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

Non-Case Information sites

Date of Government Version: 12/10/2018  
Date Data Arrived at EDR: 12/11/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 06/11/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Varies

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

Other Oil & Gas Projects sites

Date of Government Version: 12/10/2018  
Date Data Arrived at EDR: 12/11/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 06/11/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/10/2018

Date Data Arrived at EDR: 12/11/2018

Date Made Active in Reports: 01/15/2019

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 06/11/2019

Next Scheduled EDR Contact: 09/23/2019

Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/10/2018

Date Data Arrived at EDR: 12/11/2018

Date Made Active in Reports: 01/15/2019

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 06/11/2019

Next Scheduled EDR Contact: 09/23/2019

Data Release Frequency: Varies

## WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/10/2018

Date Data Arrived at EDR: 12/11/2018

Date Made Active in Reports: 01/15/2019

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 06/11/2019

Next Scheduled EDR Contact: 09/23/2019

Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### *EDR Exclusive Records*

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/13/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 196	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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	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	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 01/11/2019	Telephone: 510-567-6700
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 07/08/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Semi-Annually

#### UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2019	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 04/11/2019	Telephone: 510-567-6700
Date Made Active in Reports: 06/20/2019	Last EDR Contact: 07/08/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/24/2047
	Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 01/07/2019  
Date Data Arrived at EDR: 01/08/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 58

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 06/17/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Varies

## BUTTE COUNTY:

### CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 07/08/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 05/01/2019  
Date Data Arrived at EDR: 05/02/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 27

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 06/24/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 02/27/2019  
Date Data Arrived at EDR: 02/28/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 32

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 08/19/2019  
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: 02/14/2019  
Date Data Arrived at EDR: 02/19/2019  
Date Made Active in Reports: 03/08/2019  
Number of Days to Update: 17

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 04/29/2019  
Next Scheduled EDR Contact: 08/12/2019  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 02/20/2019  
Date Data Arrived at EDR: 05/01/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 29

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 04/25/2019  
Next Scheduled EDR Contact: 08/12/2019  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 02/27/2019  
Date Data Arrived at EDR: 02/28/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 32

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 04/29/2019  
Next Scheduled EDR Contact: 08/12/2019  
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: 04/10/2019  
Date Data Arrived at EDR: 04/11/2019  
Date Made Active in Reports: 04/30/2019  
Number of Days to Update: 19

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 06/26/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

### CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District  
Telephone: 830-934-6500  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

## HUMBOLDT COUNTY:

### CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 12/11/2018  
Date Data Arrived at EDR: 12/13/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 33

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 05/20/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 04/24/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/27/2019  
Number of Days to Update: 63

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/03/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 70

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 08/02/2019  
Data Release Frequency: Varies

## KERN COUNTY:

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 05/06/2019  
Date Data Arrived at EDR: 05/07/2019  
Date Made Active in Reports: 07/16/2019  
Number of Days to Update: 70

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 05/02/2019  
Next Scheduled EDR Contact: 08/19/2019  
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: 05/16/2019  
Date Data Arrived at EDR: 05/17/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 13

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: Varies

## LAKE COUNTY:

### CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 02/08/2019  
Date Data Arrived at EDR: 02/12/2019  
Date Made Active in Reports: 03/12/2019  
Number of Days to Update: 28

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Varies

## LASSEN COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 01/17/2019  
Date Data Arrived at EDR: 01/18/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 46

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

### AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009  
Date Data Arrived at EDR: 03/31/2009  
Date Made Active in Reports: 10/23/2009  
Number of Days to Update: 206

Source: N/A  
Telephone: N/A  
Last EDR Contact: 06/17/2019  
Next Scheduled EDR Contact: 09/30/2019  
Data Release Frequency: No Update Planned

### HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/19/2018  
Date Data Arrived at EDR: 01/10/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 56

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 07/08/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Semi-Annually

### LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/15/2019  
Date Data Arrived at EDR: 04/16/2019  
Date Made Active in Reports: 06/21/2019  
Number of Days to Update: 66

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 04/16/2019  
Next Scheduled EDR Contact: 07/29/2019  
Data Release Frequency: Varies

### LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019  
Date Data Arrived at EDR: 01/15/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 51

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 07/12/2019  
Next Scheduled EDR Contact: 10/28/2019  
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: 01/01/2019  
Date Data Arrived at EDR: 04/05/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 54

Source: Los Angeles Fire Department  
Telephone: 213-978-3800  
Last EDR Contact: 06/25/2019  
Next Scheduled EDR Contact: 10/07/2019  
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: 04/17/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/29/2019
	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: 01/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 04/05/2019	Telephone: 213-978-3800
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 10/07/2019
	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: 01/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 04/05/2019	Telephone: 213-978-3800
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 10/07/2019
	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: 04/08/2019	Source: Community Health Services
Date Data Arrived at EDR: 04/16/2019	Telephone: 323-890-7806
Date Made Active in Reports: 06/21/2019	Last EDR Contact: 04/16/2019
Number of Days to Update: 66	Next Scheduled EDR Contact: 07/29/2019
	Data Release Frequency: Annually

## UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 07/12/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/28/2019
	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: 04/22/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/05/2019
	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: 04/04/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 310-618-2973
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 04/22/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/05/2019
	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: 02/20/2019	Source: Madera County Environmental Health
Date Data Arrived at EDR: 02/22/2019	Telephone: 559-675-7823
Date Made Active in Reports: 03/07/2019	Last EDR Contact: 05/16/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 09/02/2019
	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: 06/26/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

Date of Government Version: 03/11/2019	Source: Merced County Environmental Health
Date Data Arrived at EDR: 03/19/2019	Telephone: 209-381-1094
Date Made Active in Reports: 05/08/2019	Last EDR Contact: 05/16/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/02/2019
	Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List  
CUPA Facility List

Date of Government Version: 02/21/2019	Source: Mono County Health Department
Date Data Arrived at EDR: 02/26/2019	Telephone: 760-932-5580
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 05/23/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

MONTEREY COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019

Date Data Arrived at EDR: 02/07/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 26

Source: Monterey County Health Department

Telephone: 831-796-1297

Last EDR Contact: 06/28/2019

Next Scheduled EDR Contact: 10/14/2019

Data Release Frequency: Varies

## NAPA COUNTY:

### LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017

Date Data Arrived at EDR: 01/11/2017

Date Made Active in Reports: 03/02/2017

Number of Days to Update: 50

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269

Last EDR Contact: 05/24/2019

Next Scheduled EDR Contact: 09/09/2019

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: 02/21/2019

Date Data Arrived at EDR: 02/22/2019

Date Made Active in Reports: 03/08/2019

Number of Days to Update: 14

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269

Last EDR Contact: 05/24/2019

Next Scheduled EDR Contact: 09/09/2019

Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/20/2019

Date Data Arrived at EDR: 05/21/2019

Date Made Active in Reports: 05/30/2019

Number of Days to Update: 9

Source: Community Development Agency

Telephone: 530-265-1467

Last EDR Contact: 05/13/2019

Next Scheduled EDR Contact: 08/12/2019

Data Release Frequency: Varies

## ORANGE COUNTY:

### IND\_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2019

Date Data Arrived at EDR: 05/09/2019

Date Made Active in Reports: 05/30/2019

Number of Days to Update: 21

Source: Health Care Agency

Telephone: 714-834-3446

Last EDR Contact: 05/06/2019

Next Scheduled EDR Contact: 08/19/2019

Data Release Frequency: Annually

### LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2019

Date Data Arrived at EDR: 05/09/2019

Date Made Active in Reports: 05/30/2019

Number of Days to Update: 21

Source: Health Care Agency

Telephone: 714-834-3446

Last EDR Contact: 05/06/2019

Next Scheduled EDR Contact: 08/19/2019

Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/02/2019  
Date Data Arrived at EDR: 05/07/2019  
Date Made Active in Reports: 07/16/2019  
Number of Days to Update: 70

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/07/2019  
Next Scheduled EDR Contact: 08/19/2019  
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: 02/28/2019  
Date Data Arrived at EDR: 03/01/2019  
Date Made Active in Reports: 04/12/2019  
Number of Days to Update: 62

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 06/17/2019  
Data Release Frequency: Semi-Annually

## PLUMAS COUNTY:

### CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 06/26/2019  
Number of Days to Update: 64

Source: Plumas County Environmental Health  
Telephone: 530-283-6355  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
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: 04/11/2019  
Date Data Arrived at EDR: 04/12/2019  
Date Made Active in Reports: 04/30/2019  
Number of Days to Update: 18

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 06/17/2019  
Next Scheduled EDR Contact: 09/30/2019  
Data Release Frequency: Quarterly

### UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 04/11/2019  
Date Data Arrived at EDR: 04/12/2019  
Date Made Active in Reports: 06/20/2019  
Number of Days to Update: 69

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 06/17/2019  
Next Scheduled EDR Contact: 09/30/2019  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/05/2019  
Date Data Arrived at EDR: 04/02/2019  
Date Made Active in Reports: 06/18/2019  
Number of Days to Update: 77

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 06/28/2019  
Next Scheduled EDR Contact: 10/14/2019  
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: 02/06/2019  
Date Data Arrived at EDR: 04/02/2019  
Date Made Active in Reports: 06/20/2019  
Number of Days to Update: 79

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 06/28/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 03/11/2019  
Date Data Arrived at EDR: 03/13/2019  
Date Made Active in Reports: 04/30/2019  
Number of Days to Update: 48

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 07/16/2019  
Next Scheduled EDR Contact: 08/19/2019  
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: 02/27/2019  
Date Data Arrived at EDR: 02/28/2019  
Date Made Active in Reports: 04/02/2019  
Number of Days to Update: 33

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 05/06/2019  
Next Scheduled EDR Contact: 08/19/2019  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/04/2019  
Date Data Arrived at EDR: 03/05/2019  
Date Made Active in Reports: 04/02/2019  
Number of Days to Update: 28

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 06/04/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 56

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
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: 04/24/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/27/2019  
Number of Days to Update: 63

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
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: 06/03/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 05/02/2019  
Next Scheduled EDR Contact: 08/19/2019  
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: 11/05/2018  
Date Data Arrived at EDR: 11/06/2018  
Date Made Active in Reports: 12/14/2018  
Number of Days to Update: 38

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 05/02/2019  
Next Scheduled EDR Contact: 08/19/2019  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018  
Date Data Arrived at EDR: 06/26/2018  
Date Made Active in Reports: 07/11/2018  
Number of Days to Update: 15

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 06/17/2019  
Next Scheduled EDR Contact: 09/30/2019  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 02/13/2019  
Date Data Arrived at EDR: 02/15/2019  
Date Made Active in Reports: 03/14/2019  
Number of Days to Update: 27

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 09/02/2019  
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: 03/04/2019  
Date Data Arrived at EDR: 03/13/2019  
Date Made Active in Reports: 04/29/2019  
Number of Days to Update: 47

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 06/12/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Annually

### LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019  
Date Data Arrived at EDR: 03/29/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 06/10/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: No Update Planned

## SANTA CLARA COUNTY:

### CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 02/13/2019  
Date Data Arrived at EDR: 02/19/2019  
Date Made Active in Reports: 03/06/2019  
Number of Days to Update: 15

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 09/02/2019  
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



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 05/24/2019  
Next Scheduled EDR Contact: 09/09/2019  
Data Release Frequency: No Update Planned

## SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 01/30/2019  
Date Data Arrived at EDR: 02/01/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 34

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 08/19/2019  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 05/23/2017  
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 09/02/2019  
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: 03/05/2019  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 04/29/2019  
Number of Days to Update: 53

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Quarterly

### UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 04/03/2019  
Number of Days to Update: 27

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 03/18/2019  
Date Data Arrived at EDR: 03/26/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 36

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 06/19/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Varies

## LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2019  
Date Data Arrived at EDR: 04/11/2019  
Date Made Active in Reports: 04/30/2019  
Number of Days to Update: 19

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 06/19/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 12/11/2018  
Date Data Arrived at EDR: 12/13/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 33

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Varies

## SUTTER COUNTY:

### UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 02/28/2019  
Date Data Arrived at EDR: 03/01/2019  
Date Made Active in Reports: 04/03/2019  
Number of Days to Update: 33

Source: Sutter County Environmental Health Services  
Telephone: 530-822-7500  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 09/16/2019  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

### CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 12/13/2018  
Date Data Arrived at EDR: 12/18/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 28

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 05/16/2019  
Next Scheduled EDR Contact: 08/19/2019  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List Cupa facility list

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/24/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/28/2019  
Number of Days to Update: 64

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 04/22/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 12/26/2018  
Date Data Arrived at EDR: 12/27/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 19

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 05/06/2019  
Next Scheduled EDR Contact: 08/19/2019  
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: 05/02/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Varies

## VENTURA COUNTY:

### BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/26/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/27/2019  
Number of Days to Update: 63

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 04/23/2019  
Next Scheduled EDR Contact: 08/05/2019  
Data Release Frequency: Quarterly

### LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 06/26/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: No Update Planned

### LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 05/09/2019  
Next Scheduled EDR Contact: 08/26/2019  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/26/2019	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 04/25/2019	Telephone: 805-654-2813
Date Made Active in Reports: 05/30/2019	Last EDR Contact: 04/23/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Quarterly

## UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/26/2019	Source: Environmental Health Division
Date Data Arrived at EDR: 03/13/2019	Telephone: 805-654-2813
Date Made Active in Reports: 04/03/2019	Last EDR Contact: 06/12/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/23/2019
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/29/2019	Source: Yolo County Department of Health
Date Data Arrived at EDR: 04/05/2019	Telephone: 530-666-8646
Date Made Active in Reports: 06/20/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Annually

## YUBA COUNTY:

### CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 05/03/2019	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 05/07/2019	Telephone: 530-749-7523
Date Made Active in Reports: 07/16/2019	Last EDR Contact: 04/25/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 08/12/2019
	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: 02/11/2019	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 02/12/2019	Telephone: 860-424-3375
Date Made Active in Reports: 03/04/2019	Last EDR Contact: 05/14/2019
Number of Days to Update: 20	Next Scheduled EDR Contact: 08/26/2019
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 04/10/2019  
Date Made Active in Reports: 05/16/2019  
Number of Days to Update: 36

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 07/09/2019  
Next Scheduled EDR Contact: 10/21/2019  
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: 05/01/2019  
Date Made Active in Reports: 06/21/2019  
Number of Days to Update: 51

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 05/01/2019  
Next Scheduled EDR Contact: 08/12/2019  
Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/27/2018  
Number of Days to Update: 35

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 02/23/2018  
Date Made Active in Reports: 04/09/2018  
Number of Days to Update: 45

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 05/17/2019  
Next Scheduled EDR Contact: 09/02/2019  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/15/2018  
Date Made Active in Reports: 07/09/2018  
Number of Days to Update: 24

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/10/2019  
Next Scheduled EDR Contact: 09/23/2019  
Data Release Frequency: Annually

## Oil/Gas Pipelines

Source: PennWell Corporation

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 PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## Electric Power Transmission Line Data

Source: PennWell Corporation

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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.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

408841  
MITCHELL CANYON ROAD  
CLAYTON, CA 94517

### TARGET PROPERTY COORDINATES

Latitude (North):	37.935515 - 37° 56' 7.85"
Longitude (West):	121.943254 - 121° 56' 35.71"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	592864.2
UTM Y (Meters):	4198981.5
Elevation:	506 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	5640430 CLAYTON, 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).

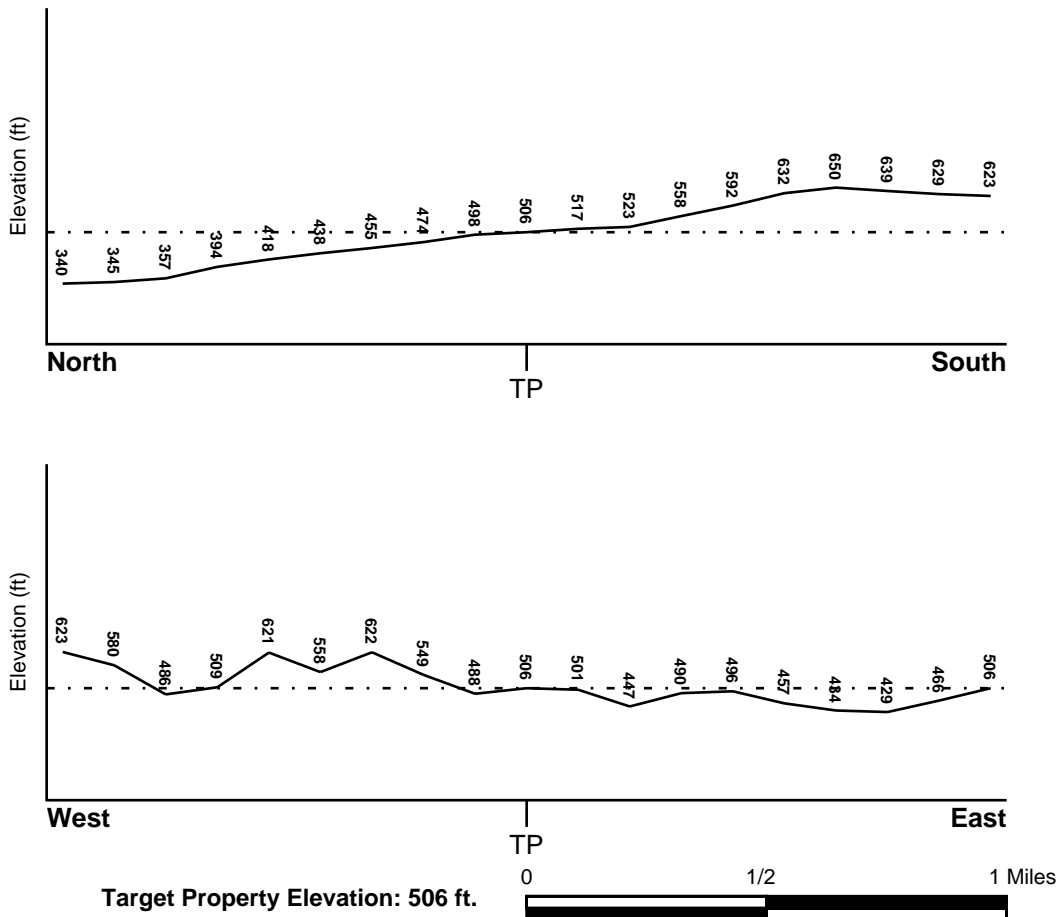
## TOPOGRAPHIC INFORMATION

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 ENE

## 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>
06013C0312F	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06013C0304F	FEMA FIRM Flood data
06013C0308F	FEMA FIRM Flood data
06013C0316F	FEMA FIRM Flood data

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
CLAYTON	YES - refer to the Overview Map and Detail Map

## **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

Search Radius:	1.25 miles
Status:	Not found

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

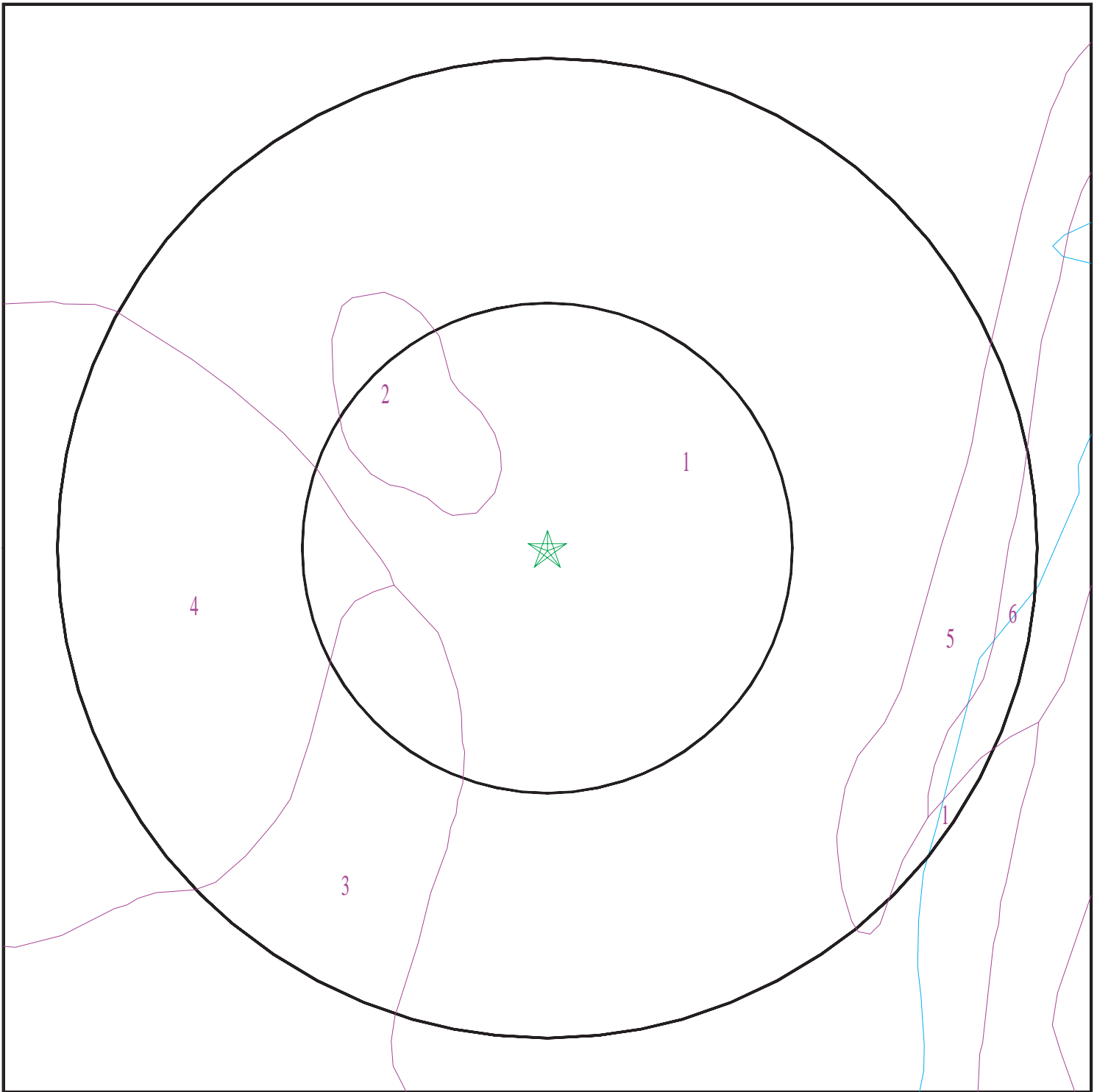
Era:	Mesozoic
System:	Cretaceous
Series:	Upper Cretaceous
Code:	uK <i>(decoded above as Era, System &amp; Series)</i>

#### **GEOLOGIC AGE IDENTIFICATION**

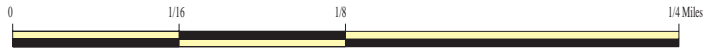
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 5720065.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: 408841  
ADDRESS: Mitchell Canyon Road  
Clayton CA 94517  
LAT/LONG: 37.935515 / 121.943254

CLIENT: AEI Consultants  
CONTACT: Tony Chilesse  
INQUIRY #: 5720065.2s  
DATE: July 17, 2019 8:03 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: PERKINS

Soil Surface Texture: gravelly 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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
2	18 inches	59 inches	gravelly 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	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1

### Soil Map ID: 2

Soil Component Name: LOS OSOS

Soil Surface Texture: clay loam

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

Soil Drainage Class: Well drained

## 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	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
2	9 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
3	31 inches	35 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:

### Soil Map ID: 3

Soil Component Name: GILROY

Soil Surface Texture: clay loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 102 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
2	14 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
3	29 inches	40 inches	very gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
4	40 inches	44 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:

### Soil Map ID: 4

Soil Component Name: GILROY

Soil Surface Texture: clay loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 102 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:
2	14 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:
3	29 inches	40 inches	very gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:
4	40 inches	44 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:

### Soil Map ID: 5

Soil Component Name: Perkins

Soil Surface Texture: gravelly 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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
2	18 inches	59 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1

### Soil Map ID: 6

Soil Component Name: ZAMORA

Soil Surface Texture: silty clay loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
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	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.1



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	16 inches	72 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.1

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<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>
No Wells Found		

### **FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

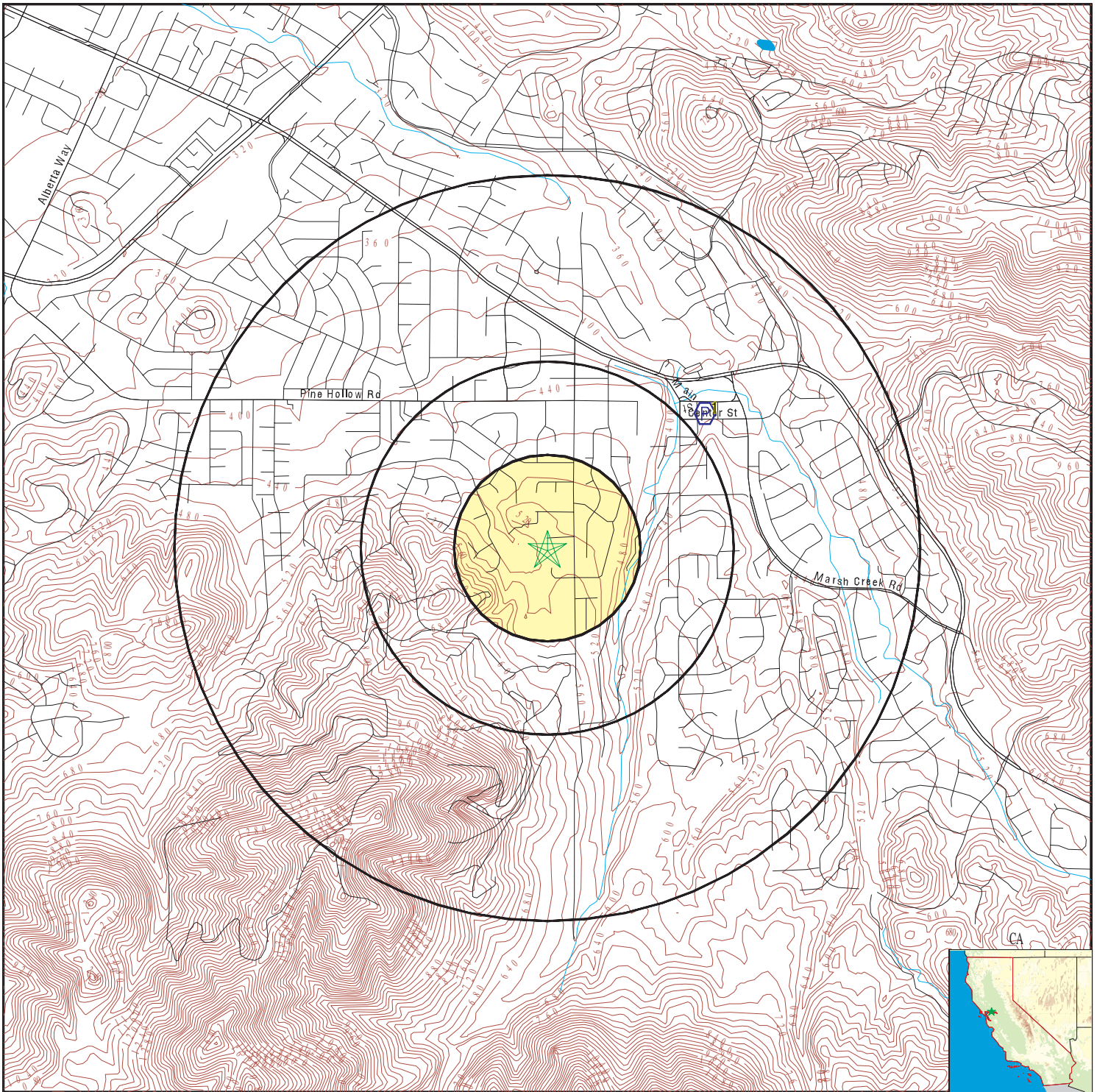
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CA0706053	1/2 - 1 Mile NE

Note: PWS System location is not always the same as well location.

### **STATE DATABASE WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

# PHYSICAL SETTING SOURCE MAP - 5720065.2s



- 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: 408841  
 ADDRESS: Mitchell Canyon Road  
 Clayton CA 94517  
 LAT/LONG: 37.935515 / 121.943254

CLIENT: AEI Consultants  
 CONTACT: Tony Chilese  
 INQUIRY #: 5720065.2s  
 DATE: July 17, 2019 8:03 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**1**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FRDS PWS      CA0706053**

PWS ID:	CA0706053	PWS type:	System Owner/Responsible Party
PWS name:	VERNON PETERSON	PWS address:	Not Reported
PWS city:	CLAYTON	PWS state:	CA
PWS zip:	94517	PWS ID:	CA0706053
Activity status:	Active	Date system activated:	7706
Date system deactivated:	Not Reported	Retail population:	00000025
System name:	BROKEN WHEEL	System address:	VERNON PETERSON
System address:	HWY 4 & HILL AVE	System city:	OAKLEY
System state:	CA	System zip:	94561
Population served:	Under 101 Persons	Treatment:	Untreated
Latitude:	375627	Longitude:	1215604

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94517	6	0

Federal EPA Radon Zone for CONTRA COSTA County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

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Federal Area Radon Information for Zip Code: 94517

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.500 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> 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.

### STATE RECORDS

#### 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.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

#### California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### RADON

#### State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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# **APPENDIX D**

## **HISTORICAL SOURCES**





**408841**

Mitchell Canyon Road

Clayton, CA 94517

Inquiry Number: 5720065.5

July 18, 2019

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

07/18/19

**Site Name:**

408841  
Mitchell Canyon Road  
Clayton, CA 94517  
EDR Inquiry # 5720065.5

**Client Name:**

AEI Consultants  
2500 Camino Diablo  
Walnut Creek, CA 94597  
Contact: Tony Chilese



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

## Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Flight Date: August 27, 1998	USDA
1993	1"=500'	Acquisition Date: June 12, 1993	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1979	1"=500'	Flight Date: August 16, 1979	USDA
1966	1"=500'	Flight Date: May 15, 1966	USDA
1963	1"=500'	Flight Date: July 16, 1963	EDR Proprietary Aerial Viewpoint
1958	1"=500'	Flight Date: August 13, 1958	USDA
1950	1"=500'	Flight Date: March 12, 1950	USDA
1949	1"=500'	Flight Date: October 13, 1949	USGS
1946	1"=500'	Flight Date: July 22, 1946	USGS
1939	1"=500'	Flight Date: July 25, 1939	USDA

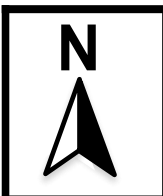
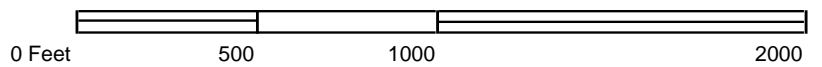
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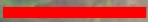
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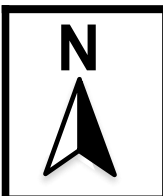
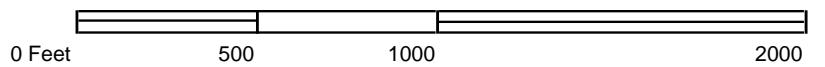


**AERIAL PHOTOGRAPH - 2016**





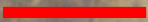
Legend:  
Approximate Property Boundary: 

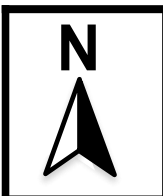
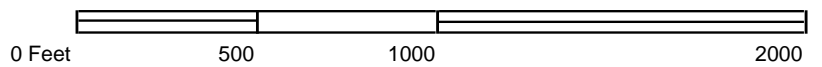


**AERIAL PHOTOGRAPH - 2012**





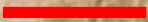
Legend:  
Approximate Property Boundary: 

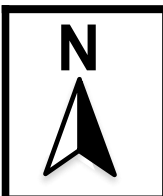
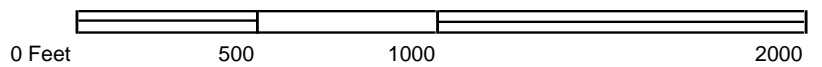


**AERIAL PHOTOGRAPH - 2009**





Legend:  
Approximate Property Boundary: 

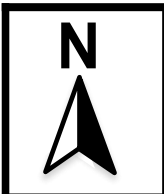
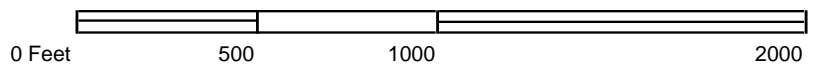


## AERIAL PHOTOGRAPH - 2006





Legend:  
Approximate Property Boundary: 

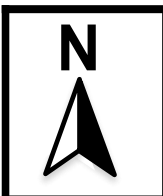
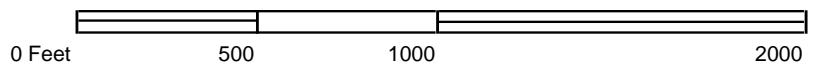


## AERIAL PHOTOGRAPH - 1998





Legend:  
Approximate Property Boundary: 

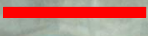


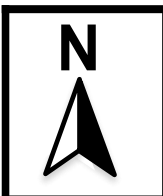
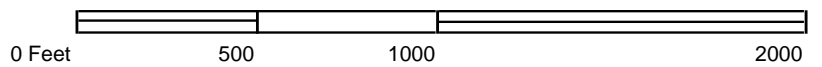
**AERIAL PHOTOGRAPH - 1993**







Legend:  
Approximate Property Boundary: 



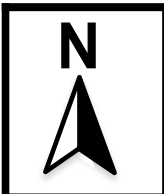
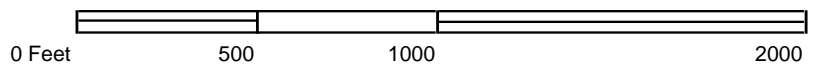
## AERIAL PHOTOGRAPH - 1982





Legend:

Approximate Property Boundary: 

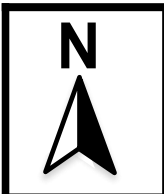
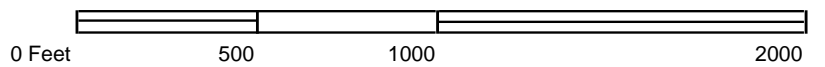


## AERIAL PHOTOGRAPH - 1979





Legend:  
Approximate Property Boundary: 



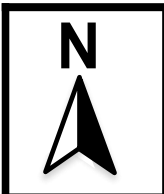
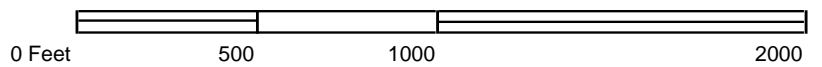
**AERIAL PHOTOGRAPH - 1966**





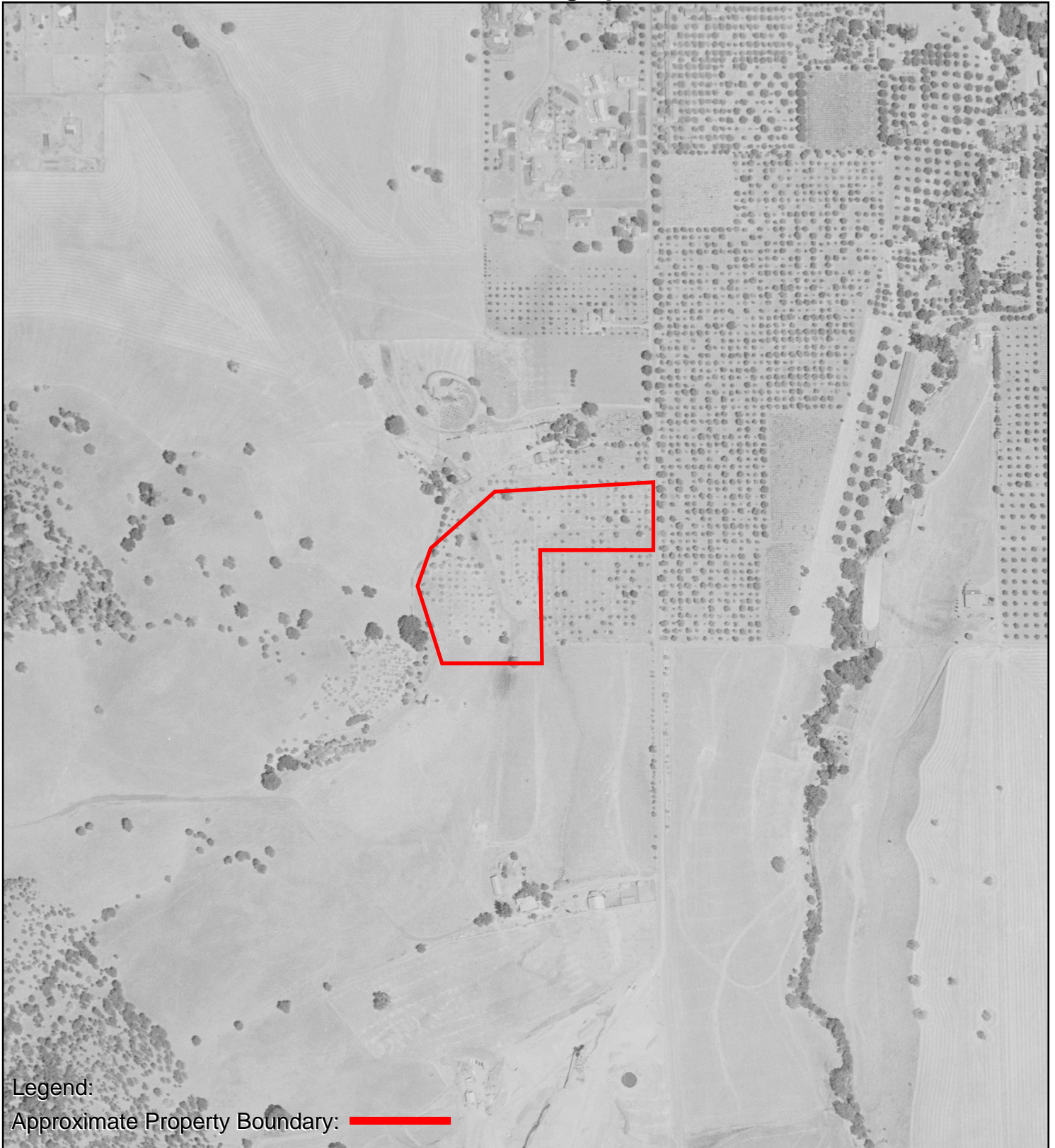
Legend:

Approximate Property Boundary: 

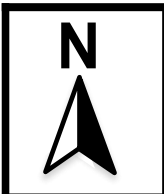
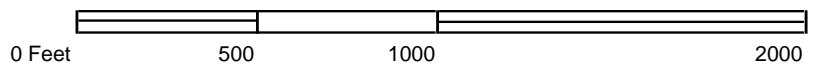


**AERIAL PHOTOGRAPH - 1963**





Legend:  
Approximate Property Boundary: 

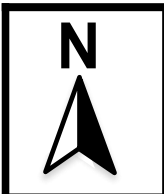
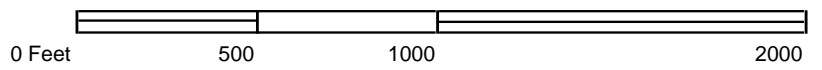


## AERIAL PHOTOGRAPH - 1958





Legend:  
Approximate Property Boundary: 



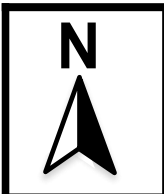
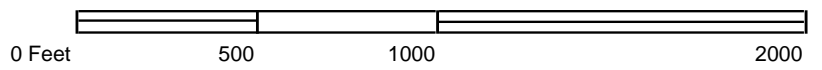
**AERIAL PHOTOGRAPH - 1950**





Legend:

Approximate Property Boundary: 

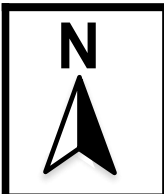
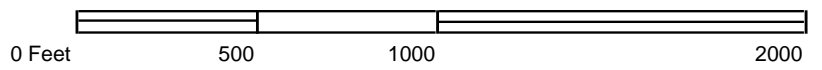


## AERIAL PHOTOGRAPH - 1949





Legend:  
Approximate Property Boundary: 



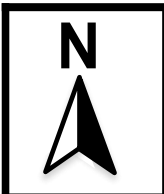
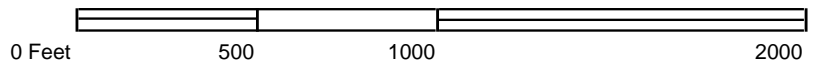
## AERIAL PHOTOGRAPH - 1946







Legend:  
Approximate Property Boundary: 



## AERIAL PHOTOGRAPH - 1939



408841

Mitchell Canyon Road

Clayton, CA 94517

Inquiry Number: 5720065.3

July 17, 2019

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

07/17/19

**Site Name:**

408841  
Mitchell Canyon Road  
Clayton, CA 94517  
EDR Inquiry # 5720065.3

**Client Name:**

AEI Consultants  
2500 Camino Diablo  
Walnut Creek, CA 94597  
Contact: Tony Chilese



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by AEI Consultants were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** 112B-4C29-BD50  
**PO #** 200133  
**Project** 408841

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 112B-4C29-BD50

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

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

*The Sanborn Library LLC Since 1866™*

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# **APPENDIX E**

## **REGULATORY AGENCY RECORDS**



**Public Records Request Form**

SR# \_\_\_\_\_  
(office use only)

Date: \_\_\_\_\_

Name: \_\_\_\_\_ Business Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone #: \_\_\_\_\_

\_\_\_\_\_ E-mail: \_\_\_\_\_

I am requesting the following public record(s) from Contra Costa Health Services Hazardous Materials Programs.

**RECORD(S) REQUESTED:** (Use additional form (s) if more space is needed)

**Our records are available electronically. Please choose one of the methods below:**

Please copy the record(s) and send FedEx to the above mailing address.  
The cost is \$15.00 and is payable by check or credit card (Visa, Discover or M/C).

Please copy the record(s) and notify me when ready for pick up.  
The cost is \$3.00 and is payable by check or cash (**MUST BE EXACT**).

**If you would like us to provide a list of sites in our database, please choose:**  
Please copy all "Active" or "Inactive" sites from database Cost: \$15.00

You may email the completed form to [ccchazmat@hsd.cccounty.us](mailto:ccchazmat@hsd.cccounty.us), or mail or hand deliver to Contra Costa Health Services Hazardous Materials Programs at 4585 Pacheco Blvd., Suite 100, Martinez, CA 94553; or FAX to (925) 646-2073.

**Office Use Only:**

Date Received \_\_\_\_\_ Completed \_\_\_\_\_  No records exist responsive to this request.

Picked Up \_\_\_\_\_ or FedEx \_\_\_\_\_ XR \_\_\_\_\_ Time Spent \_\_\_\_\_

Rev. April 2018





July 9, 2019

Attn: File Review  
Contra Costa County Fire Protection District  
P: (925) 941-3300  
F: (925) 634-3309

**Subject: Freedom of Information Act (FOIA) Request/File Review Request**  
AEI Project No. 408841

To Whom It May Concern:

AEI has been contracted to perform a Phase I Environmental Site Assessment. Please indicate if you have any current or archived records pertaining to aboveground storage tanks (ASTs), underground storage tanks (USTs), hazardous materials storage/disposal and/or industrial waste discharges for the following site(s):

- 121-090-011-2 and 121-090-01-1, Mitchell Canyon Road, Clayton, CA

If you do not have any records, please indicate in the space below and fax back this sheet to (510) 338-3192, or call me at (925) 708-7325, if you have any questions.

Sincerely,

Lea Palumbo  
Project Manager  
lpalumbo@aeiconsultants.com

<input type="checkbox"/> No Files for address(es) listed above	
Name:	<input type="text"/>
Title:	<input type="text"/>
Phone:	<input type="text"/>
X <input type="text"/>	<input type="text"/>
Signature	Date

# **APPENDIX F**

## **OTHER SUPPORTING DOCUMENTATION**



# AEI Consultants

## ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Instructions: Please complete the following questionnaire to the best of your knowledge.

<b>PROJECT/SITE INFORMATION</b>			
Project Street Address(es): Mitchell Canyon Road			
City: Clayton	County: Contra Costa	State: CA	Zip: 94517
Parcel Number(s): 121-090-011-2 and 121-090-016-1			
<b>CONTACT INFORMATION</b>			
Contact	Name	Phone Number	Years Associated w/Site
Owner:	Fred B. Clayton	(650) 264-8006	50 <input type="checkbox"/> years
Site Contact:	Karen Isobe	(408) 836-8442	
Key Site Manager:			
Previous Owner(s), Operators and/or Occupants:			
<b>PROPERTY USE AND SPECIFICATIONS</b>			
<input type="checkbox"/> Single-Family Residential		<input checked="" type="checkbox"/> Vacant or undeveloped	
<input type="checkbox"/> Multi-Family Residential		<input type="checkbox"/> Agricultural <i>specify type:</i>	
<input type="checkbox"/> Commercial Office		<input type="checkbox"/> Industrial <i>specify type:</i>	
<input type="checkbox"/> Commercial Retail		<input type="checkbox"/> Other <i>specify type:</i>	
Provide a general site description: 2 parcels, vacant & undeveloped, approximately 8.65 Acres on Mitchell Canyon Rd., Clayton, CA			
Provide all known current/former addresses and/or parcel numbers: Parcels <input type="checkbox"/> 121-090-011-2 & <input type="checkbox"/> 121-090-016-1			
Total Property Size: Approximately 8.65 acres		Original Construction Date: 50 <input type="checkbox"/> years	
Total Number of Buildings: 1 Shed		Was Construction Phased? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unk	
Total Sq. Ft. of Buildings: Approx. 216 sq. ft.		Dates of Renovations/Phases:	
Are there any plans for site redevelopment or change in use? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please describe:			
Are there any bodies of water on or immediately adjacent to the site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please describe:			
Electricity Provider: N/A		Gas Provider: N/A	
Heating System Fuel Source(s): N/A		Cooling System Power Source: N/A	
Potable Water Source/Provider: Well			
Any waste water discharge at the site? N/A <input type="checkbox"/> Septic Tank/Leachfield <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Other		Sanitary Sewer Provider N/A (if applicable):	
<b>OCCUPANTS/TENANTS</b>			
Current Occupant(s)/Tenant(s)	Length of occupancy	Brief description of on-site operations	
N/A			
Previous Occupant(s)/Tenant(s)	Length of occupancy	Brief description of on-site operations	
N/A			

Project Number:	408841	Return via Fax:	(510) 338-3192
Project Manager:	Lea Palumbo	Return via Email:	lpalumbo@aeiconsultants.com





# AEI Consultants

Has the subject site ever been occupied by the following? N/A

Dry Cleaner       Gas Station       Printing Facility       Manufacturing Facility

If yes, provide length of occupancy:

Have any previous investigations been performed at the subject property?  Yes  No

If Yes, are copies available?  Yes  No

If Yes, also note type and describe:  Phase I ESA       Phase II       Asbestos       Lead Paint       Radon

## ON-SITE ENVIRONMENTAL CONDITIONS

Are you aware of any of the following environmental conditions, **either current or former**, on the subject site?

**NOTE:** If applicable, please provide inventory records, inspection records and Safety Data Sheets (SDSs) to site inspector during site inspection.

Environmental Condition/Issue	Response	Notes on Yes Responses
Aboveground Storage Tanks	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Underground Storage Tanks	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Hazardous/Toxic Substances	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Stored Chemicals	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Chemical Spills/Releases	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Dump Areas/Landfills	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Waste Treatment Systems	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Wastewater Discharges	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Floor Drains/Sumps/Clarifiers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pits, Ponds, Lagoons	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Stained Soil/Vegetation	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Pesticide/Herbicide Use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Polychlorinated Biphenyls (PCBs)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Electrical Transformers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Hydraulic Lifts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Elevators	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Asbestos	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Project Number:	408841	Return via Fax:	(510) 338-3192
Project Manager:	Lea Palumbo	Return via Email:	lpalumbo@aeiconsultants.com



# AEI Consultants

Environmental Condition/Issue	Response	Notes on Yes Responses
Lead-Based Paint	<input type="checkbox"/> Yes <input type="checkbox"/> No	Shed was painted 50 <input type="checkbox"/> years ago
Oil/Gas Wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Environmental Cleanups	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Environmental Permits	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

## OTHER ENVIRONMENTAL CONDITIONS

Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property?

Yes  No If yes, provide brief explanation.

Are you aware of any pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property?

Yes  No If yes, provide brief explanation.

Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?

Yes  No If yes, provide brief explanation.

Are you aware of any incidents of flooding, leaks, or other water intrusion, and/or complaints related to indoor air quality?

Yes  No If yes, provide brief explanation.

Are you aware of any cases of extreme water damage or mold throughout the building(s)?

Yes  No If yes, provide brief explanation.

Person completing questionnaire: Fred B. Clayton / Karen Isobe

Title/Affiliation to the subject property: Owner / Trustee

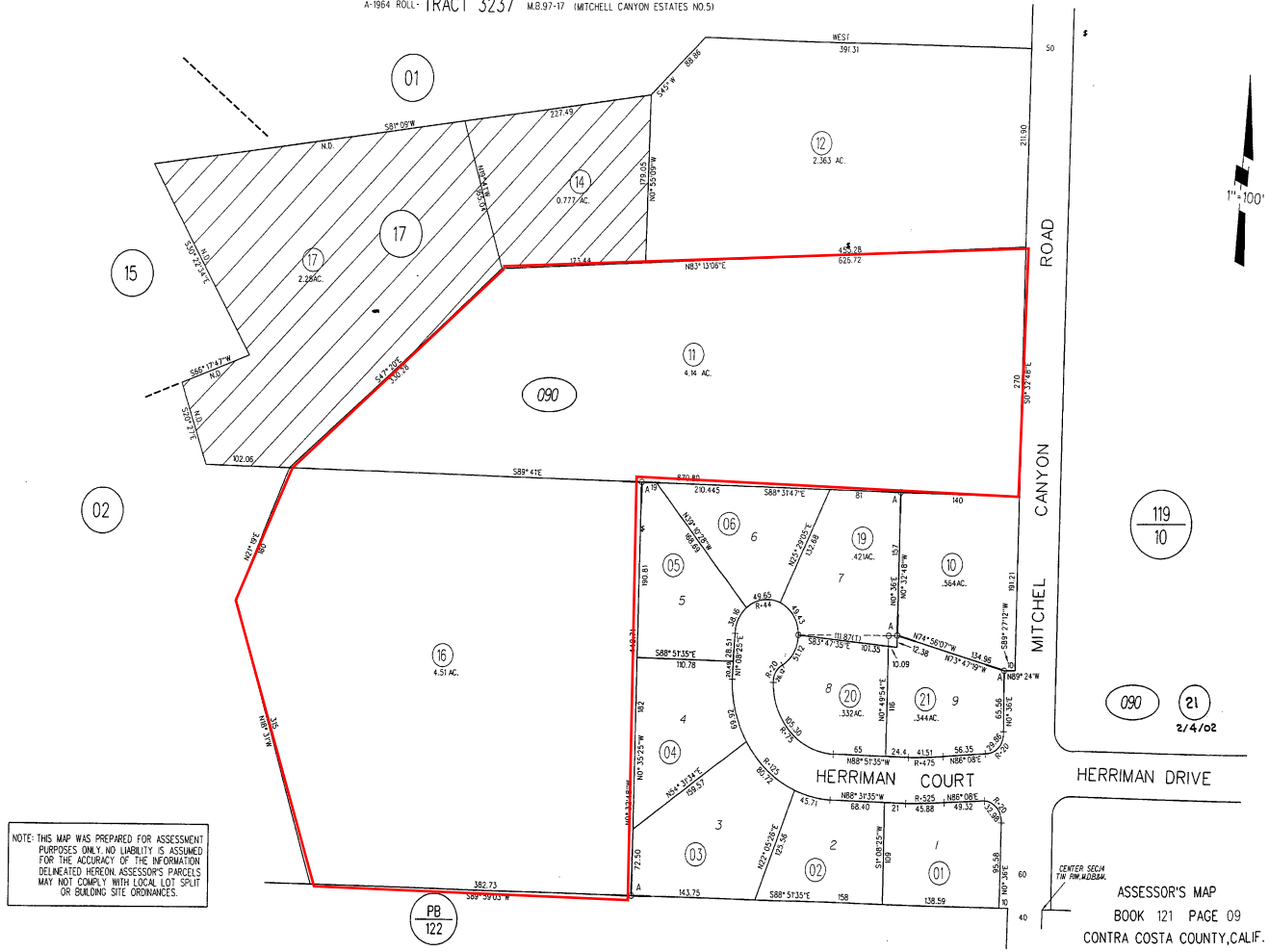
Number of years associated with the subject property: 50  years

Date: August 5, 2019

Project Number:	408841	Return via Fax:	(510) 338-3192
Project Manager:	Lea Palumbo	Return via Email:	lpalumbo@aeiconsultants.com

POR. NW 1/4 SEC. 14, T1N R1W, M.D.B. & M.

A-1964 ROLL - TRACT 3237 M.B. 97-17 MITCHELL CANYON ESTATES NO. 51



NOTE: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE INFORMATION DELINEATED HEREON. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT SPLIT OR BUILDING SITE ORDINANCES.

ASSESSOR'S MAP  
BOOK 121 PAGE 09  
CONTRA COSTA COUNTY, CALIF.

# ENVIROSTOR

mitchell canyon road, clayton, ca

Map Address

**Sites and Facilities**

**Cleanup Sites**

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

**STATUS**  
All Statuses

**Permitted Sites**

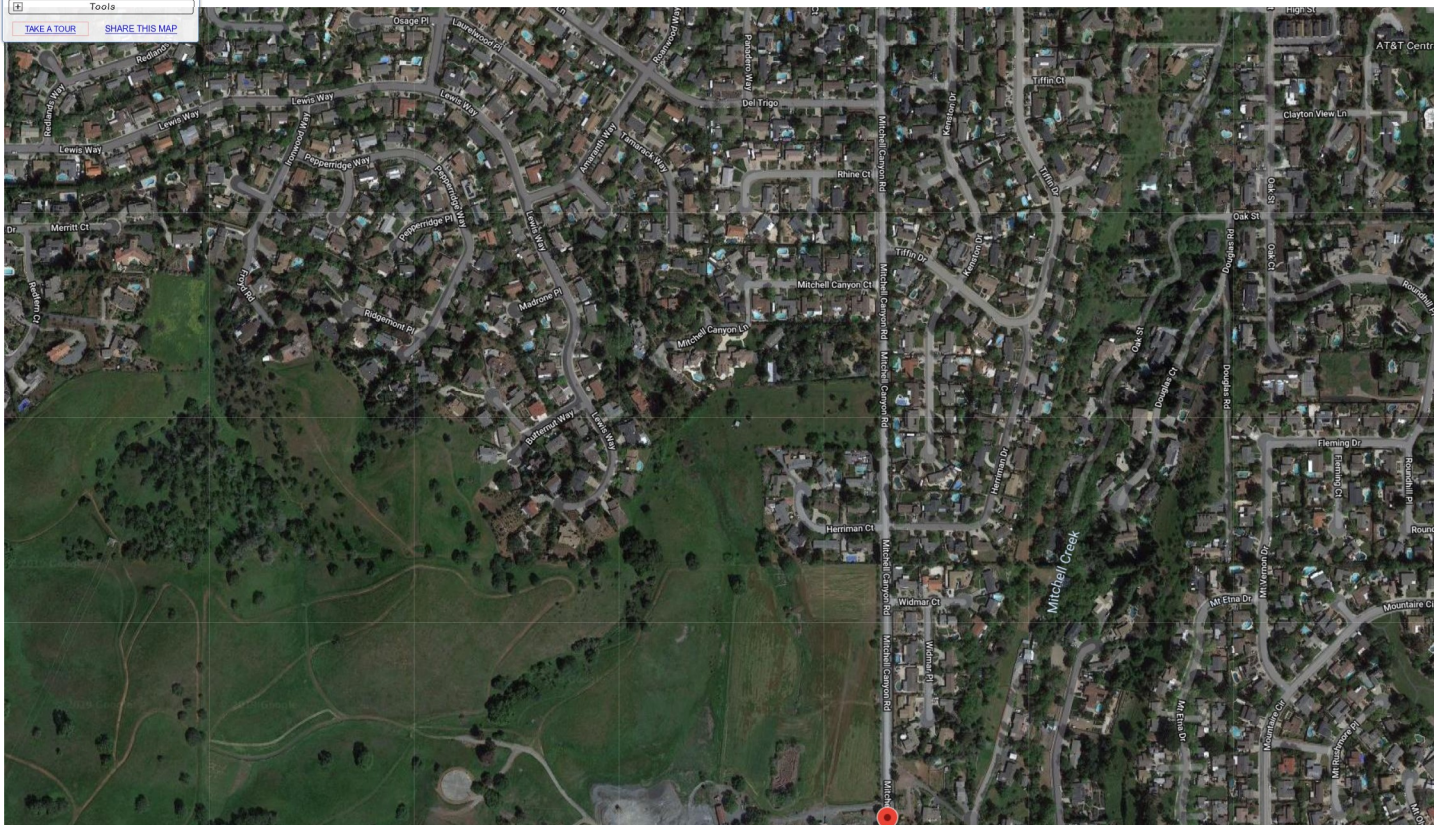
- Operating
- Post-Closure
- Non-Operating

**Other Sites**

**GIS Layers**

**Tools**

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



Map data ©2019 Imagery ©2019, CNES / Airbus, DigitalGlobe, 50m, GeoEye, Skyview, USDA, Esri, Report a map error.

**SITES CURRENTLY VISIBLE ON MAP**      **STATUS**      **PROJECT TYPE**      **SITES LISTED**      **ADDRESS**      **CITY**      [EXPORT THIS LIST TO EXCEL](#)

PROJECT NAME	STATUS	PROJECT TYPE	SITES LISTED	ADDRESS	CITY

**GEOTRACKER**

Enter an address  [Map Address](#)

**Sites and Facilities - INFO**

- Cleanup Sites
  - LUST Cleanup Sites
  - Cleanup Program Sites
  - Military Cleanup Sites
  - DTSC Cleanup Sites
- Permitted Facilities
  - Waste Discharge Requirements (WDR) Sites
  - Permitted USTs - INFO
  - DTSC Hazardous Waste Sites
  - Land Disposal Sites - SELECT NONE
    - Burn Dump
    - Compost Facility
    - Illegal Disposal Site
    - Other
    - Pre-Title 27 - CAI
    - Title 27 - Land Treatment Unit
    - Title 27 - Mining Unit
    - Title 27 - Municipal Solid Waste Landfill
    - Title 27 - Non-Municipal Solid Waste Landfill
    - Title 27 - Surface Impoundment
    - Title 27 - Waste Pile
    - Unknown
- Integrated Levels Regulatory Program Sites
  - Oil / Gas Sites
    - Other Oil and Gas Projects
    - Produced Water Ponds
  - Underground Injection Control (UIC)
  - Well Stimulation Project - Exclusion
  - Well Stimulation Project - Groundwater Monitoring Plan
  - Well Stimulation Projects - Property Owner Sampling
- Confined Animal Sites
- Other Sites
  - Project Sites
  - Non-Case Information Sites
  - Sampling Points - Public
  - Field Points

SIGNIFIES A CLOSED SITE

**Tools**

**Map Coverages**

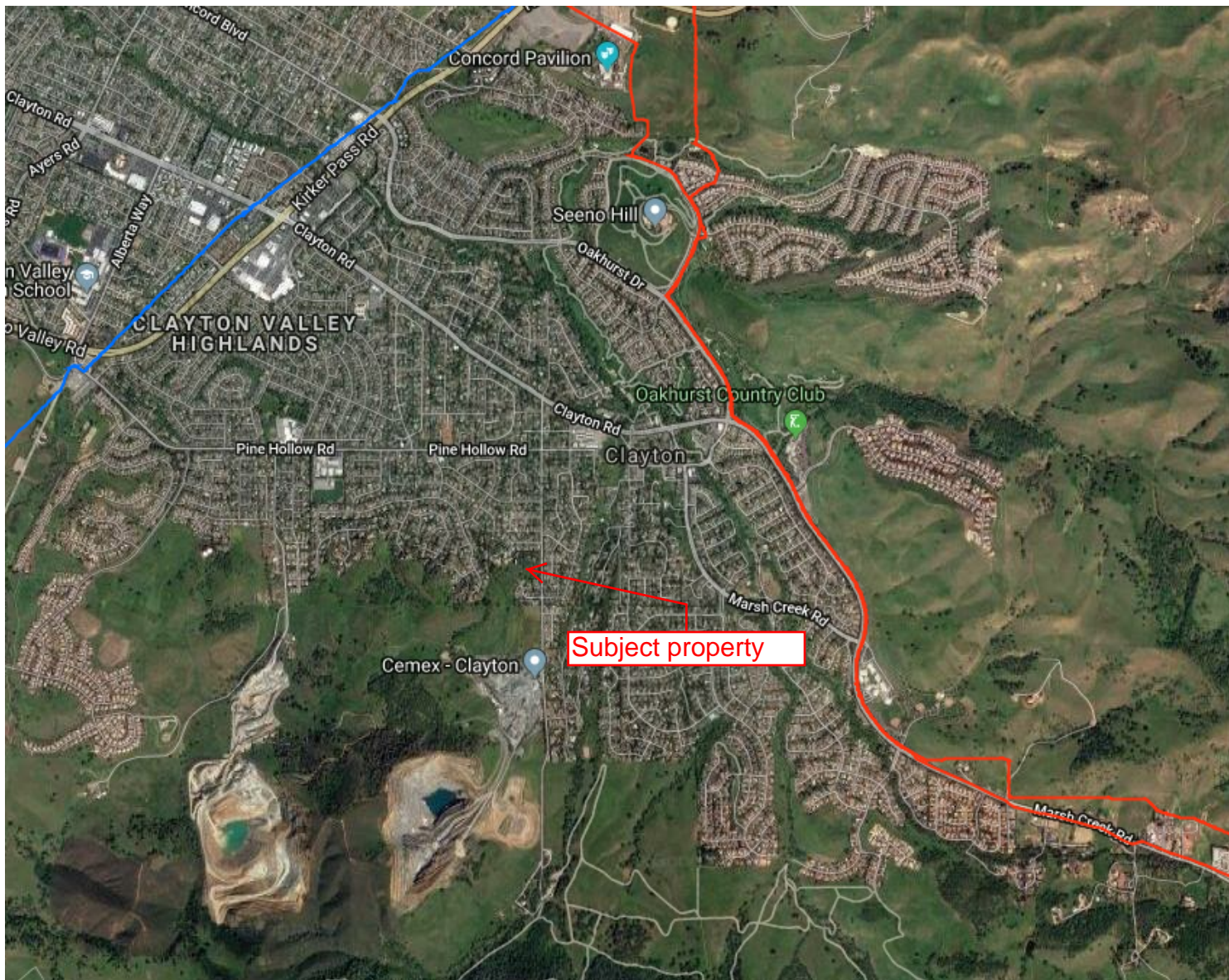
[TAKE A TOUR](#) [VIEW ON GAMA](#)



Map data ©2019 Imagery ©2019, CNES / Airbus, DigitalGlobe, 60 m, vswr/ol Survey, USDA Et, Report a map error

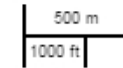
**SITES CURRENTLY VISIBLE ON MAP**      **0 SITES LISTED**      [EXPORT THIS LIST TO EXCEL](#)

SITE NAME	GLOBAL ID	FAC ID	STATUS	ADDRESS	CITY
-----------	-----------	--------	--------	---------	------



## Legend

- Accidents (Liquid)
- Incidents (Gas)
- LNG Plants
- Breakout Tanks
- Gas Transmission Pipelines
- Hazardous Liquid Pipelines



Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

**This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.**

Questions regarding this map or its contents can be directed to [npms@dot.gov](mailto:npms@dot.gov).

Projection: Geographic

Datum: NAD83

Map produced by the Public Viewer application at [www.npms.phmsa.dot.gov](http://www.npms.phmsa.dot.gov)

Date Printed: Aug 01, 2019



**Well Finder**  
DOGGR GIS

More Info | Help | ©

Well Status and Well Type Filter

Search: mitchell canyon road, clayton

Zoom to Field

Measurement

Layers

- Notice and Permit
  - Well
  - Geothermal Well
  - EPA Well for Aquifer Exemption Review
- Facility
  - Tank
  - Pit/Sump
  - Settling
  - Facility Boundary (non-wellstar)
- Underground Gas Storage
- Well Stimulation
- TR26 Onshore Seep Count
- Oil/Gas Field
- DOGGR District
- Public Land Survey System
- City
- Legislative Districts
- County
- California Geologic Map

Basemaps

300ft

14.514 37.936028 -121.938793

# **APPENDIX G**

# **QUALIFICATIONS**



## **Lea Palumbo □Project Manager, Due Diligence**

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BS □Environmental Policy Analysis and Planning (emphasis in Climate Change Policy),  
University of California, Davis

Ms. Palumbo has been in the environmental service industry since 2013. She provides project management to ensure ASTM compliance and satisfaction of client requirements for Phase I Environmental Site Assessments, Environmental Transaction Screens, Regulatory Database Reviews, and Historical Records Reviews.

Project experience for Ms. Palumbo includes:

- Phase I Environmental Site Assessments (PHI ESA)
- Limited Environmental Site Assessments
- Environmental Transaction Screens (ETS)
- Records Research with Risk Assessments
- Regulatory Database Reviews
- Historical Records Reviews

In addition, prior to joining the environmental consulting industry, Ms. Palumbo spent four years studying a diverse range of environmental disciplines including: environmental policy analysis, environmental law, geology, Geographic Information Systems (GIS), sustainable development, and environmental planning.

## **Richard D. Fehler – National Client Manager**

---

B.S. – Zoology, University of California, Davis

California Registered Environmental Assessor (REA I)

Mr. Fehler has over twenty-five years of environmental management experience gained as an environmental consultant; in the chemical manufacturing industry; in the hazardous waste management industry; and as an environmental regulator. He specializes in all aspects of environmental due diligence, regulatory compliance and negotiations, hazardous waste management, and auditing. Mr. Fehler has also received training in Greenhouse Gas and Sustainability Verification.

Mr. Fehler has served as project principal on hundreds of projects with wide-ranging scopes, including peer reviews and desktop reviews; due diligence on large portfolios (200 sites+), as well as single assets; investigation and management of lead, asbestos, mold, and *Legionella*; investigation, remediation and management of contamination in groundwater, soil and soil vapor; regulatory compliance and auditing; and representing clients with regulators to negotiate site closure/No Further Action and/or to develop effective remediation strategies and budgets.

Project experience for Mr. Fehler includes:

- Multiple Site Due Diligence - Managed and designed projects for many large portfolios (100-plus) of varied properties spread across various states. The scopes of work frequently include Indoor Air Quality/mold issues, lead-based paint, asbestos, and radon testing. The design of appropriate Phase II sampling is frequently required to resolve and close issues.
- Environmental Compliance Reviews – Designed and managed many environmental compliance audits for single or multiple assets. Project activities usually involve inspections, interviews, reviewing environmental permits, past environmental reports, standard operating procedures, material safety data sheets (MSDS), and other information related to regulatory compliance in the areas of hazardous materials, hazardous and non-hazardous waste management, workplace health & safety, air permitting and emission reporting, waste water permitting and monitoring, storm water management, underground storage tanks, and aboveground storage tanks.
- Regulatory Negotiation – Managed many Phase II investigations conducted in response to regulatory requirements or to resolve issues and/or to obtain case closure or No Further Action. Represented clients with regulators to negotiate appropriate scopes of work and move projects to successful completion.

# **APPENDIX H**

## **LIST OF COMMONLY USED ABBREVIATIONS**

## UNITS

<b>µg/L</b>	Micrograms per Liter	<b>pCi/L</b>	PicoCuries per Liter
<b>mg/kg</b>	Milligrams per Kilogram	<b>ppb</b>	Parts per Billion
<b>mg/L</b>	Milligrams per Liter	<b>ppm</b>	Parts per Million

## ABBREVIATIONS AND ACRONYMS

<b>ACM</b>	Asbestos-Containing Material	<b>NESHAP</b>	National Emission Standards for Hazardous Air Pollutants
<b>ADJ</b>	Adjacent site	<b>NFA</b>	No Further Action
<b>AEI</b>	AEI Consultants	<b>NFRAP</b>	No Further Remedial Action Planned
<b>AHERA</b>	Asbestos Hazard Emergency Response Act	<b>NLR</b>	No Longer Reporting
<b>APN</b>	Assessor's Parcel Number	<b>NOV</b>	Notice of Violation
<b>AST</b>	Aboveground Storage Tank	<b>NPL</b>	National Priorities List
<b>AUL</b>	Activity and Use Limitation	<b>O&amp;M</b>	Operations and Maintenance
<b>bgs</b>	Below Ground Surface	<b>OEC</b>	Other Environmental Considerations
<b>BTEX</b>	Benzene, Toluene, Ethylbenzene, and Xylenes	<b>OSHA</b>	Occupational Safety and Health Administration
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act	<b>PCB</b>	Polychlorinated Biphenyl
<b>CERCLIS</b>	Comprehensive Environmental Response Compensation and Liability Information System	<b>PCE, PERC</b>	Perchloroethylene, Tetrachloroethylene, Tetrachloroethene
<b>CESQGs</b>	Conditionally Exempt Small Quantity Generators	<b>RCRA</b>	Resource Conservation and Recovery Act
<b>COC</b>	Contaminant of Concern	<b>REC</b>	Recognized Environmental Condition
<b>CREC</b>	Controlled Recognized Environmental Condition	<b>RP</b>	Responsible Party
<b>EC</b>	Engineering Controls	<b>SDS</b>	Safety Data Sheet
<b>EDR</b>	Environmental Data Resources, Inc.	<b>SEMS</b>	Superfund Enterprise Management System
<b>EPA</b>	Environmental Protection Agency	<b>SF</b>	Square Footage/Square Feet
<b>ERIS</b>	Environmental Risk Information Services	<b>SP</b>	Subject Property
<b>ERNS</b>	Emergency Response Notification System	<b>SQG</b>	Small Quantity Generator
<b>ESA</b>	Environmental Site Assessment	<b>SWLF</b>	Solid Waste Landfill
<b>GPR</b>	Ground-Penetrating Radar	<b>SVOC</b>	Semi-Volatile Organic Compound
<b>HREC</b>	Historical Recognized Environmental Condition	<b>TCE</b>	Trichloroethylene, Trichloroethene
<b>HVAC</b>	Heating, Ventilation and Air Conditioning	<b>TPH</b>	Total Petroleum Hydrocarbons
<b>HWS</b>	Hazardous Waste Site	<b>TPHd</b>	Total Petroleum Hydrocarbons (diesel range)
<b>IC</b>	Institutional Controls	<b>TPHg</b>	Total Petroleum Hydrocarbons (gasoline range)
<b>LBP</b>	Lead-Based Paint	<b>TPHo</b>	Total Petroleum Hydrocarbons (oil range)
<b>LCP</b>	Lead-Containing Paint	<b>TRPH</b>	Total Recoverable Petroleum Hydrocarbons
<b>LLP</b>	Landowner Liability Protection	<b>TSDF</b>	Treatment, Storage, and Disposal Facility
<b>LQG</b>	Large Quantity Generator	<b>USDA</b>	United States Department of Agriculture
<b>LUST</b>	Leaking Underground Storage Tank	<b>USGS</b>	United States Geological Survey
<b>MCL</b>	Maximum Contaminant Level	<b>UST</b>	Underground Storage Tank
<b>MTBE</b>	Methyl Tertiary Butyl Ether	<b>VCP</b>	Voluntary Cleanup Program
<b>ND</b>	None Detected	<b>VOC</b>	Volatile Organic Compound



# AEI Consultants

September 17, 2019

## LIMITED SOIL SAMPLE INVESTIGATION

**Property Identification:**

Mitchel Canyon Road,  
Clayton, California

AEI Project No. 408841

**Prepared for:**

Mr. Rick Rosenbaum  
Ponderosa Homes II, Inc.  
5020 Franklin Drive, Suite 200  
Pleasanton, California 94588

**Prepared by:**

AEI Consultants  
2500 Camino Diablo,  
Walnut Creek, California 94597  
925.746.6000

AEI Contact: Peter McIntyre  
Executive Vice President  
925-746-6004  
pmcintyre@aeiconsultants.com

Environmental  
Due Diligence

Building  
Assessments

Site Investigation  
& Remediation

Energy Performance  
& Benchmarking

Industrial Hygiene

Construction  
Risk Management

Zoning Analysis  
Reports & ALTA  
Surveys

National Presence

Regional Focus

Local Solutions

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Appendix A	Laboratory Analytical Report
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# AEI

## Consultants

September 17, 2019

Mr. Rick Rosenbaum  
Ponderosa Homes II, Inc.  
5020 Franklin Drive, Suite 200  
Pleasanton, California 94588

**Subject: Limited Soil Sample Investigation**  
Mitchell County Road  
Clayton, California 94517  
AEI Project No. 408841

Dear Mr. Rosenbaum:

This report presents the results of the Limited Soil Sample Investigation performed by AEI Consultants (AEI) at the property located at Mitchell County Road, Clayton, California ("the Site"). This investigation was completed to assess the other environmental condition identified in August 9, 2019 *Draft Phase I Environmental Assessment (ESA)* completed by AEI. The investigation was completed in general accordance with the scope of services outlined in AEI's proposal dated August 15, 2019 (AEI Proposal Number 65947).

The purpose of the investigation performed was to evaluate whether subsurface conditions (i.e. soil) at the Site have been significantly impacted by former agricultural activities. Information regarding the Site description, background, scope of work, findings, conclusions, and recommendations are provided in the following sections.

### **1.0 SITE DESCRIPTION**

Based on the Draft Phase I ESA dated August 9, 2019 (AEI Project Number 408841), the Site consists a vacant lot amounting to approximately 8.65 acres. A gardening shed exist within the northern portion of the vacant lot. The Site location and vicinity are shown on Figure 1. Figure 2 presents the Sample Location Map.

Based on a review of the United States Geological Survey (USGS) and United States Department of the Interior maps, the area surrounding the Site is underlain by Quaternary alluvium and late Holocene aged surficial sediments, alluvial gravel, sand, and. According to the topographic map interpretation, the regional topographic gradient direction slopes toward the northeast and, therefore, the direction of groundwater flow beneath the Site is inferred to be to the northeast. Based on the information obtained from the State Water Resource Control Board's GeoTracker database, approximately 3,800 feet northwest of the subject property, the estimated depth to the groundwater is greater than 50 feet below ground surface (bgs).

## **2.0 BACKGROUND**

According to Draft Phase I ESA, a review of historical/regulatory agency records for the Site indicated the Site was historically used for agricultural purposes from 1939 through 1958. The Site appears to have been vacated and left as is in 1963. There is a potential agricultural chemicals, such as pesticides, were used at the Site and has been impacted by the use of such agricultural chemicals. AEI understands the Site is slated for development, potentially as residential building(s), or mixed-use commercial/residential building(s).

Therefore, AEI was requested by the client to perform a Limited Soil Sample Investigation in order to evaluate if the Site had been adversely impacted by the former agricultural activities at the Site. In addition, a sample was collected adjacent to a shed, the use of which was not well documented.

## **3.0 INVESTIGATION EFFORTS**

The investigation included the collection of 18 near-surface soil samples for laboratory analysis. The scope of work for this investigation was designed in accordance with the protocol described in the California Department of Toxic Substances Control (DTSC) document entitled *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, dated August 7, 2008.

### **3.1 Health and Safety Plan**

A site-specific health and safety plan was prepared, reviewed by onsite personnel, and kept onsite for the duration of the fieldwork.

### **3.2 Permitting and Utility Clearance**

A drilling permit and utility clearance was not required for this scope of work.

### **3.3 Soil Sampling**

On August 29, 2019, a shallow soil sampling program was completed which was consistent with the protocol outlined in the DTSC *Interim Guidance for Sampling Agricultural Properties (Third Revision)* dated August 7, 2008. For the shallow sampling program, five separate sampling areas (SS-1, SS-2, SS-3, SS-4, and SS-5) were evenly spaced across the Site. Each sampling area consisted of three to four individual samples as shown on Figure 2. Four samples were taken from the SS-1 through SS-3 areas, and three samples were taken from the SS-4 and SS-5 areas. These samples were then composited into one sample for laboratory analysis. One discrete soil sample, SS-3C was collected adjacent to the storage shed in the SS-3 area. Soil samples were collected from clear, accessible areas within the Site.

Prior to sampling, loose vegetation and soil was cleared from the ground surface at each sample location and a small hole was dug to a depth of approximately six inches to first encountered native soil, with hand tools. A hand shovel was then used to collect soil from between three and six inches which was then transferred to clean, laboratory-supplied, 4-ounce glass jars. Upon collection, each sample was labeled with the project name, project number, and the sampling date and time. After labeling, each sample was placed into an insulated, ice-filled cooler for



transport to the analytical laboratory. Chain-of-custody documentation was prepared and accompanied the samples to the analytical laboratory, a copy of which is included in Appendix A.

### **3.4 Equipment Decontamination and Investigation-Derived Waste**

The hand sampling equipment was decontaminated prior to and/or after collecting each soil sample. The equipment was cleaned using a triple-rinse method, which consisted of an initial wash containing an Alconox detergent and water solution, followed by two potable water rinses.

### **3.5 Laboratory Analyses**

The soil samples were submitted to State of California certified laboratory, Pace Analytical of Mount Juliette, Tennessee. The five soil samples were analyzed for organochlorine pesticides (OCPs) using United States Environmental Protection Agency (US EPA) Method 8081A and for arsenic and lead using US EPA Method 6010.

One soil sample located adjacent to the storage shed (SS-3C) was also analyzed for Title 22 metals by US EPA Method 6020 and Total Petroleum Hydrocarbons-complete carbon chain (TPH-cc) by US EPA Method 8015.

Chain-of-custody documentation and the certified analytical report are provided in Appendix A. No further sample analysis was conducted as part of this investigation.

## **4.0 FINDINGS**

Analytical results generated during this investigation were compared to the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) July 2019, Revision 2. The RWQCB ESLs are considered to be conservative. Under most circumstances, and within the limitations described in the RWQCB ESL guidance documents, the presence of a chemical in soil, at concentrations below the corresponding ESL guidance concentration may be assumed to not pose a significant threat to human health and the environment. Additional evaluation may be necessary at sites where a chemical is present at concentrations above the corresponding ESL.

Additionally, detections of metals in soils which exceed the ESLs were compared to the *Kearney Foundation of Soil Science Division of Agriculture and Natural Resources University of California Background Concentrations of Trace and Major Elements in California Soils* (Bradford 1996) to evaluate a background threshold.

For this investigation, AEI understands the Site will be redeveloped for residential and/or mixed-commercial/residential use. Therefore, analytical results generated during this investigation were compared to the ESLs assuming a direct shallow soil contact for residential use.

A total of ten soil samples were analyzed. Tables 1 and 2 presents a summary of the soil sample analytical results. Chain of custody documentation and the certified analytical report are provided in Appendix A. Analytical results for the soil samples indicated the following:

## Limited Soil Sample Investigation

Mitchell Canyon Road,  
Clayton, California

- Arsenic was detected in five of the soil samples analyzed, observed at concentrations ranging from 2.12 milligrams per kilogram (mg/kg) (SS-2D) to 3.88 mg/kg (SS-4B). The concentrations of arsenic exceeded the residential ESL of 0.067 mg/kg but are below the typical background concentration of 11.0 mg/kg.
- Lead was detected five of the soil samples analyzed, observed at concentrations ranging from 6.65 mg/kg (SS-2D) to 13.0 mg/kg (SS-4B). The concentrations of lead were below the residential ESL of 82 mg/kg.
- The soil sample from SS-3C indicated concentrations of antimony, barium, beryllium, cadmium, chromium, cobalt, copper, mercury, molybdenum, nickel, selenium, vanadium, and zinc all below their respective ESLs.
- TPH as gasoline, diesel, and oil were detected in the soil sample SS-3C at concentrations below their respective ESLs.
- OCPs were not detected above the laboratory reporting limit in any of the soil samples collected and analyzed.

### 5.0 SUMMARY AND CONCLUSIONS

AEI has completed a Limited Soil Sample Investigation at the Site as described above. The purpose of the investigation is to assess the presence/absence of impacted subsurface conditions (i.e. soil) in relation the historical agricultural use identified at the Site. Four samples were taken from the SS-1 through SS-3 areas, and three samples were taken from the SS-4 and SS-5 areas. These samples were then composited into one sample for laboratory analysis. One discrete soil sample, SS-3C was collected adjacent to the storage shed in SS-3 area.

Arsenic was detected in five of the soil samples at concentrations above the residential ESL but are below the typical background concentrations. Lead was detected five of the soil samples at concentrations below the residential ESL. The soil sample from SS-3C indicated concentrations of antimony, barium, beryllium, cadmium, chromium, cobalt, copper, mercury, molybdenum, nickel, selenium, vanadium, and zinc below their respective ESLs. TPH as gasoline, diesel, and oil were detected in the soil sample SS-3C at concentrations below their respective ESLs. OCPs were not detected above the laboratory reporting limit in any of the soil samples collected and analyzed. Therefore, no further investigation is warranted relative to OCPs, metals, or TPH in shallow soils at the Site.

### 6.0 REFERENCES

AEI Consultants (AEI), 2019, *Draft Phase I Environmental Site Assessment, Mitchell Canyon Road, Clayton, California 94588*, dated April 9, 2019.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), 2019, *Environmental Screening Levels*, dated July 2019, revision 2.

G. R. Bradford, et. al (Bradford), 1996, *Background Concentrations of Trace and Major Elements in California Soils*, Kearney Foundation of Soil Science Division of Agriculture and Natural Resources, University of California dated March 1996.



## **7.0 REPORT LIMITATIONS AND RELIANCE**

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the subject property. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of Ponderosa Homes II, Inc. All reports, both verbal and written, whether in draft or final, are for the benefit of Ponderosa Homes II, Inc. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. 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 AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by Ponderosa Homes II, Inc. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.



**Limited Soil Sample Investigation**

Mitchell Canyon Road,  
Clayton, California

If there are any questions regarding our investigation, please do not hesitate to contact Peter McIntyre at 925-746-7600 or the undersigned.

Sincerely,  
**AEI Consultants**

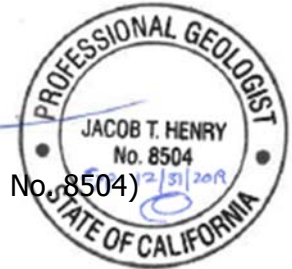


Peter McIntyre  
Executive Vice President

AEI Consultants  
2500 Camino Diablo  
Walnut Creek, California 94597  
Phone: 925-746-6000

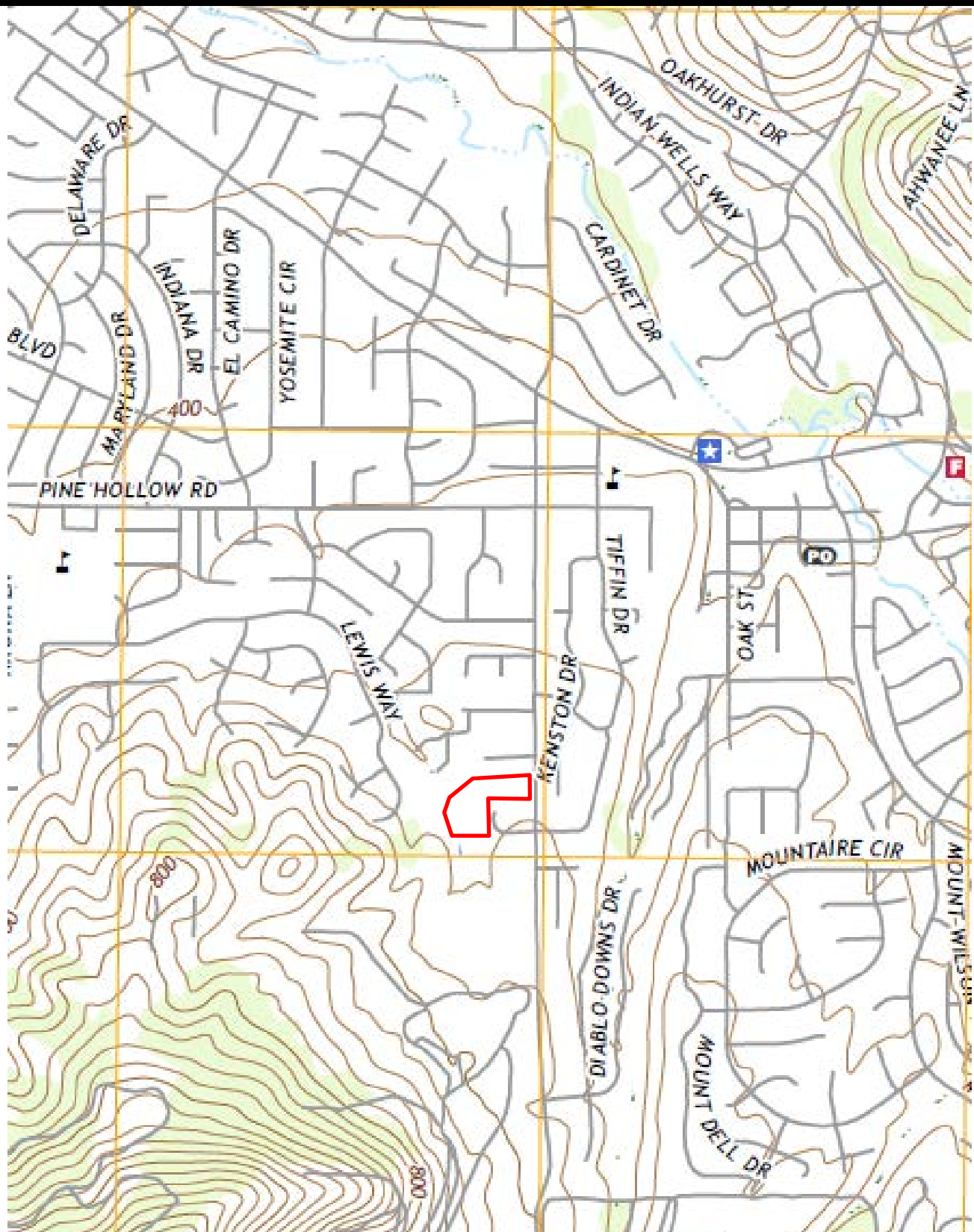


Jacob T. Henry, P.G. (Lic. No. 8504)  
Senior Geologist



## FIGURES





**Legend**

Approximate Property Boundary —

Source: USGS Topographic Map *Clayton, California* (2018)



**Figure 1: TOPOGRAPHIC MAP**

Mitchell Canyon Road, Clayton, California 94517

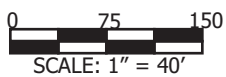
Project Number: 408841

**AEI**  
Consultants



**LEGEND**

- Approximate Property Boundary
- Sample Location



**AEI Consultants**

2500 Camino Diablo, Walnut Creek, California 94597

**SITE MAP**

Mitchell County Road,  
Clayton, California 94517

FIGURE 2  
Job Number 408841

## **TABLES**



**TABLE 1: SOIL SAMPLE DATA SUMMARY**  
**Mitchell Canyon Road, Clayton, California 94517**  
**AEI Project No. 40841**

Location ID	Date	U.S. EPA Method 8015M			U.S. EPA Method 8081
		TPH-g	TPH-d	TPH-o	Pesticides
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SS-1 COMP	8/29/2019	NA	NA	NA	<MDL
SS-2 COMP	8/29/2019	NA	NA	NA	<MDL
SS-3 COMP	8/29/2019	NA	NA	NA	<MDL
SS-4 COMP	8/29/2019	NA	NA	NA	<MDL
SS-5 COMP	8/29/2019	NA	NA	NA	<MDL
SS-3C	8/29/2019	0.523	1.82 J	22.2	<MDL
Comparison Values in mg/kg from SFBRWQCB Environmental Screening Levels (ESL), Table S-1, Res; July 2019 Revision 2		430	260	1,200	Varies

Notes:

- Analyses performed by Pace Analytical, Mt. Juliet, Tennessee
- mg/kg Milligrams per kilogram
- ND< Not detected above the method detection limit (MDL)
- J Estimated value above laboratory method detection limit, but below the limit for reporting
- Table S-1 Direct Exposure Human Health Risk Levels
- NA Not Analyzed

**TABLE 2: SOIL SAMPLE METALS DATA SUMMARY**  
**Mitchell Canyon Road, Clayton, California 94517**  
**AEI Project No. 408841**

**U.S. EPA Method 6020/7471A for Title-22 Metals (TTLIC)**

Location ID	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SS-1C	8/29/2019	NA	2.97	NA	NA	NA	NA	NA	NA	9.06	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS-2D	8/29/2019	NA	2.12	NA	NA	NA	NA	NA	NA	6.65	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS-3C	8/29/2019	0.231 J	2.74	137	0.403 J	0.322 J	72.2	35.1	76.9	76.1	0.0753	0.0783 J	79.0	0.296 J	ND<0.162	ND<0.0994	164	553	
SS-4B	8/29/2019	NA	3.88	NA	NA	NA	NA	NA	NA	13.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS-5B	8/29/2019	NA	3.12	NA	NA	NA	NA	NA	NA	9.89	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comparison Values based on California Maximum Background Concentration in mg/kg*		1.95	11.0	1,400	2.7	1.7	1,579	46.9	96.4	107.9	0.90	9.6	509	0.430	8.30	1.10	288	236	
Comparison Values in mg/kg from Environmental Screening Levels, Table S-1, Res; SFBRWQCB, July 2019		11	0.067	15,000	1,600	910	--	420	3,100	82	13	390	15,000	390	390	0.78	390	23,000	

Notes:

- Analyses performed by Pace Analytical, Mt. Juliet, Tennessee
- mg/kg Milligrams per kilogram
- bgs Below ground surface
- ND< Not detected above the method detection limit
- EPA Environmental Protection Agency
- J Estimated value above laboratory method detection limit, but below the limit for reporting
- Bold** Result exceeds applicable Comparison Value
- \* From Kearney Foundation of Soil Science 1996 Report "Background Concentrations of Trace and Major Elements in California Soils"
- Title-22 Section of the California Code of Regulations (CCR) that regulates Environmental Health Standards for the Management of Hazardous Waste
- Table S-1 Direct Exposure Human Health Risk Levels
- Comm/Ind Commercial/Industrial
- SFBRWQCB San Francisco Bay Regional Water Quality Control Board
- NA Not Analyzed
- TTLIC Total Threshold Limit Concentration

**APPENDIX A**  
**LABORATORY ANALYTICAL REPORT**

September 10, 2019

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## AEI Consultants - CA

Sample Delivery Group: L1134784

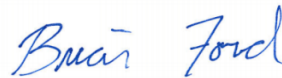
Samples Received: 08/30/2019

Project Number: 408841

Description: 408841

Report To: Jeremy Smith  
2500 Camino Diablo  
Walnut Creek, CA 94597

Entire Report Reviewed By:



Brian Ford  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



<b>Cp: Cover Page</b>	<b>1</b>	<b>1</b> Cp
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	<b>2</b> Tc
<b>Cn: Case Narrative</b>	<b>5</b>	
<b>Sr: Sample Results</b>	<b>6</b>	<b>3</b> Ss
SS-2D L1134784-02	6	
SS-3C L1134784-03	7	<b>4</b> Cn
SS-4B L1134784-04	9	<b>5</b> Sr
SS-5B L1134784-05	10	
SS-1 COMP L1134784-06	11	<b>6</b> Qc
SS-2 COMP L1134784-07	12	
SS-3 COMP L1134784-08	13	<b>7</b> Gl
SS-4 COMP L1134784-09	14	<b>8</b> Al
SS-5 COMP L1134784-10	15	
SS-1C L1134784-11	16	<b>9</b> Sc
<b>Qc: Quality Control Summary</b>	<b>17</b>	
Total Solids by Method 2540 G-2011	17	
Mercury by Method 7471A	20	
Metals (ICPMS) by Method 6020	21	
Volatile Organic Compounds (GC) by Method 8015	24	
Semi-Volatile Organic Compounds (GC) by Method 8015	25	
Pesticides (GC) by Method 8081	26	
<b>Gl: Glossary of Terms</b>	<b>28</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>29</b>	
<b>Sc: Sample Chain of Custody</b>	<b>30</b>	

# SAMPLE SUMMARY



## SS-2D L1134784-02 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 10:15  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341033	1	09/06/19 16:47	09/06/19 16:58	KDW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1338888	5	09/03/19 19:41	09/04/19 18:27	LD	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

## SS-3C L1134784-03 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 11:20  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1339240	1	09/04/19 12:47	09/04/19 20:36	TCT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1338888	5	09/03/19 19:41	09/04/19 18:31	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1340647	1.13	08/29/19 11:20	09/05/19 16:16	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1340597	1	09/05/19 19:00	09/06/19 18:18	DMW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1340615	1	09/05/19 20:56	09/06/19 16:25	RP	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

## SS-4B L1134784-04 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 11:52  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1338888	5	09/03/19 19:41	09/04/19 18:34	LD	Mt. Juliet, TN

9 Sc

## SS-5B L1134784-05 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 12:15  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1338888	5	09/03/19 19:41	09/04/19 18:37	LD	Mt. Juliet, TN

## SS-1 COMP L1134784-06 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 00:00  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1340615	1	09/05/19 20:56	09/06/19 16:37	RP	Mt. Juliet, TN

## SS-2 COMP L1134784-07 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 00:00  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1340615	1	09/05/19 20:56	09/06/19 17:14	RP	Mt. Juliet, TN

## SS-3 COMP L1134784-08 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 00:00  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1340615	1	09/05/19 20:56	09/06/19 17:26	RP	Mt. Juliet, TN

# SAMPLE SUMMARY

## SS-4 COMP L1134784-09 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 00:00  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1340615	1	09/05/19 20:56	09/06/19 17:39	RP	Mt. Juliet, TN

1  
Cp

2  
Tc

3  
Ss

## SS-5 COMP L1134784-10 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 00:00  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1341034	1	09/06/19 17:00	09/06/19 17:10	KDW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1340615	1	09/05/19 20:56	09/06/19 17:51	RP	Mt. Juliet, TN

4  
Cn

5  
Sr

6  
Qc

## SS-1C L1134784-11 Solid

Collected by: A. Borges  
 Collected date/time: 08/29/19 09:14  
 Received date/time: 08/30/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1342434	1	09/10/19 06:00	09/10/19 06:10	KBC	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1342428	5	09/09/19 13:57	09/09/19 16:12	LAT	Mt. Juliet, TN

7  
Gl

8  
Al

9  
Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.7		1	09/06/2019 16:58	<a href="#">WG1341033</a>

1 Cp

2 Tc

Metals (ICPMS) by Method 6020

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.12		0.144	0.577	5	09/04/2019 18:27	<a href="#">WG1338888</a>
Lead	6.65		0.138	0.577	5	09/04/2019 18:27	<a href="#">WG1338888</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	09/06/2019 17:10	<a href="#">WG1341034</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0753		0.00293	0.0314	1	09/04/2019 20:36	<a href="#">WG1339240</a>

Metals (ICPMS) by Method 6020

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	0.231	J	0.165	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Arsenic	2.74		0.131	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Barium	137		0.167	1.05	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Beryllium	0.403	J	0.0628	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Cadmium	0.322	J	0.0837	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Chromium	72.2		0.282	1.05	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Cobalt	35.1		0.136	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Copper	76.9		0.272	1.05	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Lead	76.1		0.126	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Molybdenum	0.0783	J	0.0732	1.05	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Nickel	79.0		0.183	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Selenium	0.296	J	0.199	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Silver	U		0.162	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Thallium	U		0.0994	0.523	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Vanadium	164		0.0941	1.05	5	09/04/2019 18:31	<a href="#">WG1338888</a>
Zinc	553		1.34	5.23	5	09/04/2019 18:31	<a href="#">WG1338888</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	0.523		0.0392	0.118	1.13	09/05/2019 16:16	<a href="#">WG1340647</a>
(S) a,a,a-Trifluorotoluene(FID)	97.9			77.0-120		09/05/2019 16:16	<a href="#">WG1340647</a>

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C12-C22 Hydrocarbons	1.82	J	0.767	4.18	1	09/06/2019 18:18	<a href="#">WG1340597</a>
C22-C32 Hydrocarbons	12.1		1.39	4.18	1	09/06/2019 18:18	<a href="#">WG1340597</a>
C32-C40 Hydrocarbons	10.1		1.39	4.18	1	09/06/2019 18:18	<a href="#">WG1340597</a>
(S) o-Terphenyl	78.4			18.0-148		09/06/2019 18:18	<a href="#">WG1340597</a>

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.000244	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Alpha BHC	U		0.000202	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Beta BHC	U		0.000317	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Delta BHC	U		0.000158	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Gamma BHC	U		0.000256	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
4,4-DDD	U		0.000172	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
4,4-DDE	U		0.000173	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
4,4-DDT	U		0.000278	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Dieldrin	U		0.0000931	0.00209	1	09/06/2019 16:25	<a href="#">WG1340615</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/29/19 11:20

L1134784

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Endosulfan I	U		0.000224	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Endosulfan II	U		0.000241	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Endosulfan sulfate	U		0.000178	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Endrin	U		0.000229	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Endrin aldehyde	U		0.000253	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Endrin ketone	U		0.000166	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Heptachlor	U		0.000106	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Heptachlor epoxide	U		0.000395	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Hexachlorobenzene	U		0.000234	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Methoxychlor	U		0.000277	0.0209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Chlordane	U		0.0408	0.209	1	09/06/2019 16:25	<a href="#">WG1340615</a>
Toxaphene	U		0.0377	0.418	1	09/06/2019 16:25	<a href="#">WG1340615</a>
(S) Decachlorobiphenyl	71.5			10.0-135		09/06/2019 16:25	<a href="#">WG1340615</a>
(S) Tetrachloro-m-xylene	57.9			10.0-139		09/06/2019 16:25	<a href="#">WG1340615</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.5		1	09/06/2019 17:10	<a href="#">WG1341034</a>

1 Cp

2 Tc

Metals (ICPMS) by Method 6020

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	3.88		0.131	0.524	5	09/04/2019 18:34	<a href="#">WG1338888</a>
Lead	13.0		0.126	0.524	5	09/04/2019 18:34	<a href="#">WG1338888</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.0		1	09/06/2019 17:10	<a href="#">WG1341034</a>

1 Cp

2 Tc

Metals (ICPMS) by Method 6020

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	3.12		0.132	0.527	5	09/04/2019 18:37	<a href="#">WG1338888</a>
Lead	9.89		0.126	0.527	5	09/04/2019 18:37	<a href="#">WG1338888</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	09/06/2019 17:10	<a href="#">WG1341034</a>

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.000254	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Alpha BHC	U		0.000210	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Beta BHC	U		0.000330	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Delta BHC	U		0.000164	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Gamma BHC	U		0.000267	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
4,4-DDD	U		0.000179	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
4,4-DDE	U		0.000180	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
4,4-DDT	U		0.000290	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Dieldrin	U		0.0000969	0.00218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Endosulfan I	U		0.000233	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Endosulfan II	U		0.000250	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Endosulfan sulfate	U		0.000185	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Endrin	U		0.000238	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Endrin aldehyde	U		0.000263	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Endrin ketone	U		0.000173	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Heptachlor	U		0.000110	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Heptachlor epoxide	U		0.000412	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Hexachlorobenzene	U		0.000244	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Methoxychlor	U		0.000289	0.0218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Chlordane	U		0.0425	0.218	1	09/06/2019 16:37	<a href="#">WG1340615</a>
Toxaphene	U		0.0392	0.435	1	09/06/2019 16:37	<a href="#">WG1340615</a>
(S) Decachlorobiphenyl	102			10.0-135		09/06/2019 16:37	<a href="#">WG1340615</a>
(S) Tetrachloro-m-xylene	77.9			10.0-139		09/06/2019 16:37	<a href="#">WG1340615</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	09/06/2019 17:10	<a href="#">WG1341034</a>

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.000265	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Alpha BHC	U		0.000219	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Beta BHC	U		0.000344	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Delta BHC	U		0.000172	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Gamma BHC	U		0.000278	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
4,4-DDD	U		0.000186	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
4,4-DDE	U		0.000188	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
4,4-DDT	U		0.000302	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Dieldrin	U		0.000101	0.00227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Endosulfan I	U		0.000243	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Endosulfan II	U		0.000261	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Endosulfan sulfate	U		0.000193	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Endrin	U		0.000249	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Endrin aldehyde	U		0.000275	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Endrin ketone	U		0.000181	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Heptachlor	U		0.000115	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Heptachlor epoxide	U		0.000430	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Hexachlorobenzene	U		0.000255	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Methoxychlor	U		0.000301	0.0227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Chlordane	U		0.0443	0.227	1	09/06/2019 17:14	<a href="#">WG1340615</a>
Toxaphene	U		0.0409	0.455	1	09/06/2019 17:14	<a href="#">WG1340615</a>
(S) Decachlorobiphenyl	95.2			10.0-135		09/06/2019 17:14	<a href="#">WG1340615</a>
(S) Tetrachloro-m-xylene	74.3			10.0-139		09/06/2019 17:14	<a href="#">WG1340615</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	09/06/2019 17:10	<a href="#">WG1341034</a>

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.000259	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Alpha BHC	U		0.000215	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Beta BHC	U		0.000337	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Delta BHC	U		0.000168	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Gamma BHC	U		0.000272	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
4,4-DDD	U		0.000182	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
4,4-DDE	U		0.000183	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
4,4-DDT	U		0.000296	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Dieldrin	U		0.0000989	0.00222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Endosulfan I	U		0.000238	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Endosulfan II	U		0.000256	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Endosulfan sulfate	U		0.000189	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Endrin	U		0.000243	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Endrin aldehyde	U		0.000269	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Endrin ketone	U		0.000177	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Heptachlor	U		0.000112	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Heptachlor epoxide	U		0.000420	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Hexachlorobenzene	U		0.000249	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Methoxychlor	U		0.000295	0.0222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Chlordane	U		0.0434	0.222	1	09/06/2019 17:26	<a href="#">WG1340615</a>
Toxaphene	U		0.0400	0.445	1	09/06/2019 17:26	<a href="#">WG1340615</a>
(S) Decachlorobiphenyl	89.1			10.0-135		09/06/2019 17:26	<a href="#">WG1340615</a>
(S) Tetrachloro-m-xylene	70.4			10.0-139		09/06/2019 17:26	<a href="#">WG1340615</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	09/06/2019 17:10	<a href="#">WG1341034</a>

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.000244	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Alpha BHC	U		0.000202	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Beta BHC	U		0.000317	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Delta BHC	U		0.000158	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Gamma BHC	U		0.000256	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
4,4-DDD	U		0.000172	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
4,4-DDE	U		0.000173	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
4,4-DDT	U		0.000278	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Dieldrin	U		0.0000931	0.00209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Endosulfan I	U		0.000224	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Endosulfan II	U		0.000241	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Endosulfan sulfate	U		0.000178	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Endrin	U		0.000229	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Endrin aldehyde	U		0.000253	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Endrin ketone	U		0.000166	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Heptachlor	U		0.000106	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Heptachlor epoxide	U		0.000395	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Hexachlorobenzene	U		0.000234	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Methoxychlor	U		0.000277	0.0209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Chlordane	U		0.0408	0.209	1	09/06/2019 17:39	<a href="#">WG1340615</a>
Toxaphene	U		0.0377	0.418	1	09/06/2019 17:39	<a href="#">WG1340615</a>
(S) Decachlorobiphenyl	86.9			10.0-135		09/06/2019 17:39	<a href="#">WG1340615</a>
(S) Tetrachloro-m-xylene	67.8			10.0-139		09/06/2019 17:39	<a href="#">WG1340615</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	09/06/2019 17:10	<a href="#">WG1341034</a>

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.000244	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Alpha BHC	U		0.000202	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Beta BHC	U		0.000317	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Delta BHC	U		0.000158	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Gamma BHC	U		0.000257	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
4,4-DDD	U		0.000172	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
4,4-DDE	U		0.000173	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
4,4-DDT	U		0.000279	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Dieldrin	U		0.0000932	0.00209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Endosulfan I	U		0.000224	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Endosulfan II	U		0.000241	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Endosulfan sulfate	U		0.000178	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Endrin	U		0.000229	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Endrin aldehyde	U		0.000253	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Endrin ketone	U		0.000167	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Heptachlor	U		0.000106	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Heptachlor epoxide	U		0.000396	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Hexachlorobenzene	U		0.000235	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Methoxychlor	U		0.000278	0.0209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Chlordane	U		0.0408	0.209	1	09/06/2019 17:51	<a href="#">WG1340615</a>
Toxaphene	U		0.0377	0.419	1	09/06/2019 17:51	<a href="#">WG1340615</a>
(S) Decachlorobiphenyl	85.9			10.0-135		09/06/2019 17:51	<a href="#">WG1340615</a>
(S) Tetrachloro-m-xylene	67.6			10.0-139		09/06/2019 17:51	<a href="#">WG1340615</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	09/10/2019 06:10	<a href="#">WG1342434</a>

1 Cp

2 Tc

Metals (ICPMS) by Method 6020

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	2.97		0.144	0.575	5	09/09/2019 16:12	<a href="#">WG1342428</a>
Lead	9.06		0.138	0.575	5	09/09/2019 16:12	<a href="#">WG1342428</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3448117-1 09/06/19 16:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1134780-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1134780-01 09/06/19 16:58 • (DUP) R3448117-3 09/06/19 16:58

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	75.9	75.5	1	0.594		10

Laboratory Control Sample (LCS)

(LCS) R3448117-2 09/06/19 16:58

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	49.9	99.8	85.0-115	



Method Blank (MB)

(MB) R3448118-1 09/06/19 17:10

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1134790-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1134790-01 09/06/19 17:10 • (DUP) R3448118-3 09/06/19 17:10

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	94.1	93.9	1	0.235		10

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3448118-2 09/06/19 17:10

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	



Method Blank (MB)

(MB) R3449022-1 09/10/19 06:10

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

L1134925-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1134925-03 09/10/19 06:10 • (DUP) R3449022-3 09/10/19 06:10

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	81.9	82.6	1	0.793		10

<sup>7</sup> Gl

<sup>8</sup> Al

Laboratory Control Sample (LCS)

(LCS) R3449022-2 09/10/19 06:10

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3447324-1 09/04/19 20:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.00280	0.0300

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3447324-2 09/04/19 20:31 • (LCSD) R3447324-3 09/04/19 20:34

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Mercury	0.500	0.509	0.500	102	100	80.0-120			1.69	20

L1134784-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134784-03 09/04/19 20:36 • (MS) R3447324-4 09/04/19 20:39 • (MSD) R3447324-5 09/04/19 20:42

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	0.523	0.0753	0.590	0.586	98.5	97.6	1	75.0-125			0.745	20

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3447291-8 09/04/19 17:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.158	0.500
Arsenic	U		0.125	0.500
Barium	U		0.160	1.00
Beryllium	U		0.0600	0.500
Cadmium	U		0.0800	0.500
Chromium	U		0.270	1.00
Cobalt	U		0.130	0.500
Copper	U		0.260	1.00
Lead	U		0.120	0.500
Molybdenum	U		0.0700	1.00
Nickel	U		0.175	0.500
Selenium	U		0.190	0.500
Silver	U		0.155	0.500
Thallium	U		0.0950	0.500
Vanadium	U		0.0900	1.00
Zinc	U		1.28	5.00

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3447291-9 09/04/19 17:03 • (LCSD) R3447291-10 09/04/19 17:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Antimony	100	111	114	111	114	80.0-120			2.98	20
Arsenic	100	93.4	96.3	93.4	96.3	80.0-120			3.09	20
Barium	100	98.7	103	98.7	103	80.0-120			4.24	20
Beryllium	100	97.2	99.6	97.2	99.6	80.0-120			2.45	20
Cadmium	100	99.0	101	99.0	101	80.0-120			2.45	20
Chromium	100	97.9	101	97.9	101	80.0-120			3.22	20
Cobalt	100	99.0	102	99.0	102	80.0-120			3.27	20
Copper	100	90.3	92.3	90.3	92.3	80.0-120			2.15	20
Lead	100	96.8	99.2	96.8	99.2	80.0-120			2.46	20
Molybdenum	100	99.4	102	99.4	102	80.0-120			2.58	20
Nickel	100	98.8	103	98.8	103	80.0-120			4.02	20
Selenium	100	98.1	99.6	98.1	99.6	80.0-120			1.53	20
Silver	20.0	20.0	20.7	100	104	80.0-120			3.31	20
Thallium	100	95.8	100	95.8	100	80.0-120			4.35	20
Vanadium	100	96.3	99.3	96.3	99.3	80.0-120			3.09	20
Zinc	100	98.3	102	98.3	102	80.0-120			3.51	20





L1134754-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134754-01 09/04/19 17:10 • (MS) R3447291-13 09/04/19 17:20 • (MSD) R3447291-14 09/04/19 17:23

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	23.1	1.03	72.1	66.1	61.5	56.3	5	75.0-125	J6	J6	8.67	20
Arsenic	23.1	21.9	107	112	74.1	78.0	5	75.0-125	J6		4.16	20
Barium	23.1	65.1	158	169	80.1	90.2	5	75.0-125			7.13	20
Beryllium	23.1	1.28	102	107	86.8	91.8	5	75.0-125			5.60	20
Cadmium	23.1	0.835	109	111	93.9	95.3	5	75.0-125			1.50	20
Chromium	23.1	19.4	117	124	84.6	90.3	5	75.0-125			5.45	20
Cobalt	23.1	9.83	110	111	86.5	87.7	5	75.0-125			1.30	20
Copper	23.1	13.3	105	106	79.6	80.0	5	75.0-125			0.419	20
Lead	23.1	52.3	153	156	87.4	89.5	5	75.0-125			1.60	20
Molybdenum	23.1	2.38	109	110	92.5	93.2	5	75.0-125			0.827	20
Nickel	23.1	25.5	122	119	83.7	81.1	5	75.0-125			2.49	20
Selenium	23.1	0.827	103	109	88.1	93.8	5	75.0-125			6.20	20
Silver	4.62	U	22.1	22.5	95.6	97.4	5	75.0-125			1.82	20
Thallium	23.1	0.622	106	106	91.0	91.0	5	75.0-125			0.00125	20
Vanadium	23.1	51.3	140	145	76.6	81.0	5	75.0-125			3.60	20
Zinc	23.1	72.7	157	168	72.7	82.6	5	75.0-125	J6		7.07	20

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3448787-1 09/09/19 15:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.125	0.500
Lead	U		0.120	0.500

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3448787-2 09/09/19 16:03 • (LCSD) R3448787-3 09/09/19 16:07

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	96.7	94.8	96.7	94.8	80.0-120			2.00	20
Lead	100	96.2	95.1	96.2	95.1	80.0-120			1.20	20

L1134784-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134784-11 09/09/19 16:12 • (MS) R3448787-6 09/09/19 16:26 • (MSD) R3448787-7 09/09/19 16:30

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	23.0	2.97	94.6	104	79.7	87.6	5	75.0-125			9.13	20
Lead	23.0	9.06	114	120	91.3	96.4	5	75.0-125			5.04	20



Method Blank (MB)

(MB) R3447908-2 09/05/19 11:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C5 - C12	U		0.0332	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.1			77.0-120

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

Laboratory Control Sample (LCS)

(LCS) R3447908-1 09/05/19 10:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C5 - C12	5.50	5.07	92.1	72.0-125	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3447844-1 09/06/19 01:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C12-C22 Hydrocarbons	U		0.733	4.00
C22-C32 Hydrocarbons	U		1.33	4.00
C32-C40 Hydrocarbons	U		1.33	4.00
(S) o-Terphenyl	76.0			18.0-148

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3447844-2 09/06/19 01:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C22-C32 Hydrocarbons	25.0	17.7	70.8	50.0-150	
C12-C22 Hydrocarbons	25.0	18.0	72.0	50.0-150	
(S) o-Terphenyl			77.0	18.0-148	

5 Sr

6 Qc

7 Gl

L1134328-24 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134328-24 09/06/19 18:32 • (MS) R3447941-1 09/06/19 18:46 • (MSD) R3447941-2 09/06/19 19:00

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C22-C32 Hydrocarbons	25.9	16.7	38.3	37.7	83.6	81.2	5	50.0-150			1.63	20
C12-C22 Hydrocarbons	25.9	4.83	25.0	24.4	96.8	94.4	5	50.0-150			2.51	20
(S) o-Terphenyl					77.8	67.7		18.0-148				

8 Al

9 Sc

Sample Narrative:

OS: Diluted due to extract viscosity



Method Blank (MB)

(MB) R3448167-1 09/06/19 15:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.000233	0.0200
Alpha BHC	U		0.000193	0.0200
Beta BHC	U		0.000303	0.0200
Delta BHC	U		0.000151	0.0200
Gamma BHC	U		0.000245	0.0200
4,4-DDD	U		0.000164	0.0200
4,4-DDE	U		0.000165	0.0200
4,4-DDT	U		0.000266	0.0200
Dieldrin	U		0.0000890	0.00200
Endosulfan I	U		0.000214	0.0200
Endosulfan II	U		0.000230	0.0200
Endosulfan sulfate	U		0.000170	0.0200
Endrin	U		0.000219	0.0200
Endrin aldehyde	U		0.000242	0.0200
Endrin ketone	U		0.000159	0.0200
Heptachlor	U		0.000101	0.0200
Heptachlor epoxide	U		0.000378	0.0200
Hexachlorobenzene	U		0.000224	0.0200
Methoxychlor	U		0.000265	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	107			10.0-135
(S) Tetrachloro-m-xylene	83.5			10.0-139

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS)

(LCS) R3448167-2 09/06/19 15:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0621	93.2	34.0-136	
Alpha BHC	0.0666	0.0659	98.9	34.0-139	
Beta BHC	0.0666	0.0615	92.3	34.0-133	
Delta BHC	0.0666	0.0656	98.5	34.0-135	
Gamma BHC	0.0666	0.0668	100	34.0-136	
4,4-DDD	0.0666	0.0652	97.9	33.0-141	
4,4-DDE	0.0666	0.0662	99.4	34.0-134	
4,4-DDT	0.0666	0.0722	108	30.0-143	
Dieldrin	0.0666	0.0631	94.7	35.0-137	
Endosulfan I	0.0666	0.0637	95.6	34.0-134	



Laboratory Control Sample (LCS)

(LCS) R3448167-2 09/06/19 15:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Endosulfan II	0.0666	0.0636	95.5	35.0-132	
Endosulfan sulfate	0.0666	0.0654	98.2	35.0-132	
Endrin	0.0666	0.0635	95.3	34.0-137	
Endrin aldehyde	0.0666	0.0557	83.6	23.0-121	
Endrin ketone	0.0666	0.0760	114	35.0-144	
Heptachlor	0.0666	0.0698	105	36.0-141	
Heptachlor epoxide	0.0666	0.0638	95.8	36.0-134	
Hexachlorobenzene	0.0666	0.0680	102	33.0-129	
Methoxychlor	0.0666	0.0693	104	28.0-150	
<i>(S) Decachlorobiphenyl</i>			119	10.0-135	
<i>(S) Tetrachloro-m-xylene</i>			95.5	10.0-139	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1134784-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134784-06 09/06/19 16:37 • (MS) R3448167-3 09/06/19 16:49 • (MSD) R3448167-4 09/06/19 17:02

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Aldrin	0.0725	U	0.0469	0.0557	64.7	76.9	1	20.0-135			17.2	37
Alpha BHC	0.0725	U	0.0502	0.0592	69.2	81.7	1	27.0-140			16.5	35
Beta BHC	0.0725	U	0.0479	0.0561	66.1	77.3	1	23.0-141			15.7	37
Delta BHC	0.0725	U	0.0478	0.0569	65.9	78.5	1	21.0-138			17.5	35
Gamma BHC	0.0725	U	0.0510	0.0602	70.3	83.0	1	27.0-137			16.7	36
4,4-DDD	0.0725	U	0.0501	0.0594	69.1	82.0	1	15.0-152			17.1	39
4,4-DDE	0.0725	U	0.0511	0.0601	70.4	82.9	1	10.0-152			16.3	40
4,4-DDT	0.0725	U	0.0582	0.0678	80.3	93.5	1	10.0-151			15.2	40
Dieldrin	0.0725	U	0.0483	0.0572	66.7	78.8	1	17.0-145			16.7	37
Endosulfan I	0.0725	U	0.0482	0.0577	66.5	79.6	1	20.0-137			17.9	36
Endosulfan II	0.0725	U	0.0487	0.0575	67.1	79.3	1	15.0-141			16.6	37
Endosulfan sulfate	0.0725	U	0.0505	0.0592	69.7	81.7	1	15.0-143			15.9	38
Endrin	0.0725	U	0.0490	0.0587	67.6	80.9	1	19.0-143			18.0	37
Endrin aldehyde	0.0725	U	0.0471	0.0547	65.0	75.4	1	10.0-139			14.8	40
Endrin ketone	0.0725	U	0.0576	0.0678	79.4	93.5	1	17.0-149			16.3	38
Heptachlor	0.0725	U	0.0519	0.0623	71.6	85.9	1	22.0-138			18.1	37
Heptachlor epoxide	0.0725	U	0.0490	0.0578	67.6	79.7	1	22.0-138			16.5	36
Hexachlorobenzene	0.0725	U	0.0520	0.0621	71.8	85.6	1	25.0-126			17.6	35
Methoxychlor	0.0725	U	0.0545	0.0634	75.2	87.4	1	10.0-159			15.0	40
<i>(S) Decachlorobiphenyl</i>					80.2	90.1		10.0-135				
<i>(S) Tetrachloro-m-xylene</i>					61.9	71.5		10.0-139				



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.  
 \* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

## State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

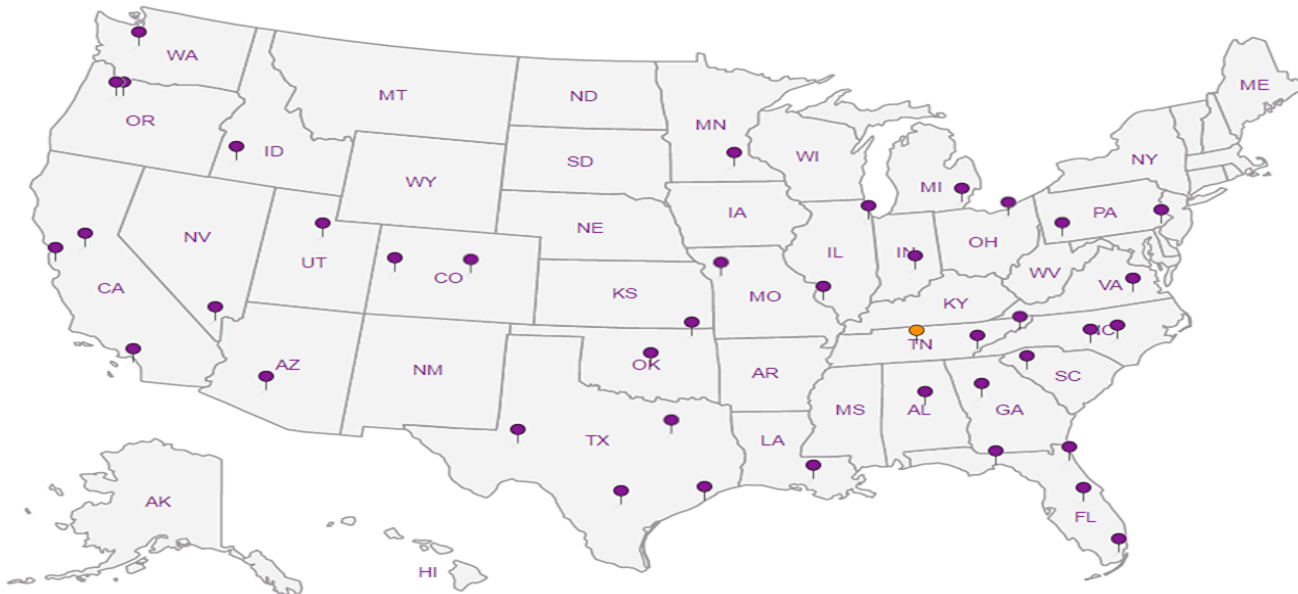
## Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



**AEI Consultants - CA**

2500 Camino Diablo  
Walnut Creek, CA 94597

Billing Information:

Accounts Payable- Jeremy Smith  
2500 Camino Diablo  
Walnut Creek, CA 94597

Pres  
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2



12065 Lebanon Rd  
Mount Juliet, TN 37122  
Phone: 615-758-5858  
Phone: 800-767-5859  
Fax: 615-758-5859



Report to:  
**Jeremy Smith**

Email To: jasmith@aeiconsultants.com

Project Description: **408841**

City/State Collected: **Clayton, CA**

Please Circle:  
PT MT CT ET

Phone: **925-746-6028**  
Fax: \*

Client Project #  
**408841**

Lab Project #  
**AEICONWCCA-SMITH**

Collected by (print):  
**J. Borges**

Site/Facility ID #

P.O. #  
**204678**

Collected by (signature):

**Rush?** (Lab MUST Be Notified)  
 Same Day  Five Day  
 Next Day  5 Day (Rad Only)  
 Two Day  10 Day (Rad Only)  
 Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N  Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
-----------	-----------	----------	-------	------	------	--------------

SS-1-A		SS	6	8/20/19	9:14	2
SS-1-B		SS			9:19	2
SS-1-C		SS			10:23	2
SS-1-D		SS			10:08	2
SS-2A		SS			10:10	2
SS-2B		SS			10:15	2
SS-2C		SS			10:56	2
SS-2D		SS			11:01	2
SS-3A		SS				2
SS-3B		SS				2

A5 Pb 6020 4ozClr-NoPres  
 CAM17 Metals 6020 4ozClr-NoPres  
 DRO/ORO-CA 4ozClr-NoPres  
 GRO-CA 2ozClr-NoPres  
 GRO-CA 40ml/NaHSO4/Syr/MeOH  
 OCPS (SV8081CA) 4ozClr-NoPres

Composite to 1 Sample per

SDG # **1134789**  
 Table #  
 Acctnum: **AEICONWCCA**  
 Template: **T155176**  
 Prelogin: **P726667**  
 PM: **110 - Brian Ford**  
 PB:  
 Shipped Via:  
 Remarks Sample # (lab only)

\* Matrix:  
 SS - Soil AIR - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - WasteWater  
 DW - Drinking Water  
 OT - Other

Remarks: **Composite into 1 Sample (here indicated)**  
 pH \_\_\_\_\_ Temp \_\_\_\_\_  
 Flow \_\_\_\_\_ Other \_\_\_\_\_

Samples returned via:  
 UPS  FedEx  Courier  
 Tracking # **451016501961-50**

Sample Receipt Checklist

COC Seal Present/Intact:	<input checked="" type="checkbox"/> NP	Y	N
COC Signed/Accurate:	<input checked="" type="checkbox"/>	Y	N
Bottles arrive intact:	<input checked="" type="checkbox"/>	Y	N
Correct bottles used:	<input checked="" type="checkbox"/>	Y	N
Sufficient volume sent:	<input checked="" type="checkbox"/>	Y	N
If Applicable			
VOA Zero Headspace:	<input checked="" type="checkbox"/>	Y	N
Preservation Correct/Checked:	<input checked="" type="checkbox"/>	Y	N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/>	Y	N

Relinquished by: (Signature)	Date: <b>8/20/19</b>	Time: <b>1:25</b>	Received by: (Signature)	Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>HCL/MeOH</b>
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C <b>57-1-5.6</b> Bottles Received: <b>41</b>
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: <b>8-30-19</b> Time: <b>9:00</b>

If preservation required by Login: Date/Time  
 Hold:  
 Condition: **NCF / OK**

**AEI Consultants - CA**

2500 Camino Diablo  
Walnut Creek, CA 94597

Billing Information:

Accounts Payable- Jeremy Smith  
2500 Camino Diablo  
Walnut Creek, CA 94597

Pres  
Chk

Analysis / Container / Preservative

Chain of Custody

Page 2 of 2



12065 Lebanon Rd  
Mount Juliet, TN 37122  
Phone: 615-758-5858  
Phone: 800-767-5859  
Fax: 615-758-5859



Report to:  
**Jeremy Smith**

Email To: jasmith@aeiconsultants.com

Project  
Description:

City/State: **Clayton, CA**

Please Circle:  
PT MT CT ET

Phone: **925-746-6028**  
Fax:

Client Project #  
**408841**

Lab Project #  
**AEICONWCCA-SMITH**

Collected by (print):  
**J. Smith**

Site/Facility ID #

P.O. #  
**204678**

Collected by (signature):

**Rush?** (Lab MUST Be Notified)

Same Day  Five Day  
 Next Day  5 Day (Rad Only)  
 Two Day  10 Day (Rad Only)  
 Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N  Y

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	A5 Pb 6020 4ozClr-NoPres	CAM17 Metals 6020 4ozClr-NoPres	DRO/ORO-CA 4ozClr-NoPres	GRO-CA 2ozClr-NoPres	GRO-CA 40ml/NaHSO4/Syr/MeOH	OCPs (SV8081CA) 4ozClr-NoPres	Waiting on Supervisor for tests	Composite
SS-3C		SS	6"	8/29/19	11:20	2		X	X	X		X		
SS-3D		SS			11:35	2						X		
SS-4A		SS			11:41	2						X		
SS-4B		SS			11:52	2	X					X		
SS-4C		SS			12:01	2						X		
SS-5A		SS			12:06	2						X		
SS-5B		SS			12:15	2	X					X		
SS-5C		SS			12:25	2						X		
		SS												
		SS												

SDG # **1134784**

Table #

Acctnum: **AEICONWCCA**

Template: **T155176**

Prelogin: **P726667**

PM: **110 - Brian Ford**

PB:

Shipped Via:

Remarks | Sample # (lab only)

03 08  
08  
09  
01 09  
09  
09  
05 10  
10

\* Matrix:  
SS - Soil AIR - Air F - Filter  
GW - Groundwater B - Bioassay  
WW - WasteWater  
DW - Drinking Water  
OT - Other

Remarks:

**3C - Discrete OCP Analysis**  
**3A/B/D - 3PT OCP Composite**

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Samples returned via:  
 UPS  FedEx  Courier

Tracking # **4510 1650 1961-50**

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N  
COC Signed/Accurate:  Y  N  
Bottles arrive intact:  Y  N  
Correct bottles used:  Y  N  
Sufficient volume sent:  Y  N  
If Applicable  
VOA Zero Headspace:  Y  N  
Preservation Correct/Checked:  Y  N  
RAD Screen <0.5 mR/hr:  Y  N

Relinquished by: (Signature)

Date:

**8/29/19 1:25 PM**

Time:

Received by: (Signature)

Trip Blank Received:  Yes /  No

HCL /  MeOH  
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: \_\_\_\_\_ °C Bottles Received: **41**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: **8-30-19** Time: **9:00**

Hold:

Condition:  
NCF **1 OK**

<b>AEI Consultants - CA</b> 2500 Camino Diablo Walnut Creek, CA 94597		Billing Information: Accounts Payable- Jeremy Smith 2500 Camino Diablo Walnut Creek, CA 94597		Pres Chk	Analysis / Container / Preservative						Chain of Custody Page ___ of ___
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12065 Lebanon Rd  
Mount Juliet, TN 37122  
Phone: 615-758-5858  
Phone: 800-767-5859  
Fax: 615-758-5859



Report to: <b>Jeremy Smith</b>		Email To: jasmith@aeiconsultants.com							
Project: <b>408841</b>		City/State: <b>Clayton, CA</b>		Please Circle: PT MT CT ET					

Phone: <b>925-746-6028</b>	Client Project # <b>408841</b>	Lab Project # <b>AEICONWCCA-SMITH</b>	As Pb 6020 4ozClr-NoPres CAM17 Metals 6020 4ozClr-NoPres DRO/ORO-CA 4ozClr-NoPres GRO-CA 2ozClr-NoPres GRO-CA 40ml/NaHSO4/syr/MeOH OCPs (SV8081CA) 4ozClr-NoPres	
Fax:	Site/Facility ID #	P.O. # <b>204678</b>		
Collected by (print): <b>F. Borges</b>	Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day			Quote #
Collected by (signature): <i>[Signature]</i>	Date Results Needed			No. of Cntrs

SDG # **1134784**  
 T# **H149**  
 Acctnum: **AEICONWCCA**  
 Template: **T155176**  
 Prelogin: **P726667**  
 PM: **110 - Brian Ford**  
 PB:  
 Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
SS-1-A	↓	SS	6"	8/29/19	939	2
SS-1-B	↓	SS			928	2
SS-1-C	↓	SS			914	2
SS-1-D	↓	SS			947	2
SS-2A	↓	SS			1023	2
SS-2B	↓	SS			1008	2
SS-2C	↓	SS			1040	2
SS-2D	↓	SS			1015	2
SS-3A	↓	SS			1056	2
SS-3B	↓	SS			1101	2

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other	Remarks:	pH _____ Temp _____ Flow _____ Other _____	Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Samples returned via: UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Tracking # <b>4510 1650 1961-50</b>		

Relinquished by: (Signature) <i>[Signature]</i>	Date: <b>8/29/19</b>	Time: <b>1:25 PM</b>	Received by: (Signature) <i>[Signature]</i>	Trip Blank Received: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No HCL/ MeOH TBR	Bottles Received: <b>41</b>
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: <b>ASDFC</b> <b>5.7-1=5.6</b>	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>	Date: <b>8-30-19</b>	Time: <b>9:10</b>

Condition:  
NCF *[Signature]*

# AEI Consultants - CA

2500 Camino Diablo  
Walnut Creek, CA 94597

Billing Information:  
Accounts Payable- Jeremy Smith  
2500 Camino Diablo  
Walnut Creek, CA 94597

Pres  
Chk

Email To: jasmith@aeiconsultants.com

Report to:  
Jeremy Smith

Project Description: City/State Collected: Clayton, CA Please Circle:  MT  CT  ET

Phone: 925-746-6028  
Fax:

Client Project # 408841 Lab Project # AEICONWCCA-SMITH

Collected by (print): A. Borges

Site/Facility ID # P.O. # 204678

Collected by (signature): *[Signature]*

Rush? (Lab MUST Be Notified)  
 Same Day  Five Day  
 Next Day  5 Day (Rad Only)  
 Two Day  10 Day (Rad Only)  
 Three Day

Date Results Needed

No. of  
Cntrs

Immediately Packed on Ice N  Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
-----------	-----------	----------	-------	------	------	--------------

SS-3C		SS	6"	8/29/19	11:20	2
SS-3D		SS			1135	2
SS-4A		SS			1141	2
SS-4B		SS			1152	2
SS-4C		SS			1201	2
SS-5A		SS			1206	2
SS-5B		SS			1215	2
SS-5C	↓	SS	↓	↓	1225	2
		SS				
		SS				

Analysis / Container / Preservative

As Pb 6020 4ozClr-NoPres  
 CAM17 Metals 6020 4ozClr-NoPres  
 DRO/ORO-CA 4ozClr-NoPres  
 GRO-CA 2ozClr-NoPres  
 GRO-CA 40ml/NaHSO4/Syr/MeOH  
 OCPs (SV8081CA) 4ozClr-NoPres

Waiting on Supervisor for tests

Chain of Custody Page \_\_\_ of \_\_\_

**Pace Analytical**  
National Center for Testing & Innovation

12065 Lebanon Rd  
Mount Juliet, TN 37122  
Phone: 615-758-5858  
Phone: 800-767-5859  
Fax: 615-758-5859



SDG # 1134789

Table #

Acctnum: AEICONWCCA  
 Template: T155176  
 Prelogin: P726667  
 PM: 110 - Brian Ford  
 PB:

Shipped Via:

Remarks Sample # (lab only)

\* Matrix:  
 SS - Soil AIR - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - WasteWater  
 DW - Drinking Water  
 OT - Other

Remarks:

pH \_\_\_\_\_ Temp \_\_\_\_\_  
 Flow \_\_\_\_\_ Other \_\_\_\_\_

Samples returned via:  UPS  FedEx  Courier

Tracking # 4510 1650 1961 -50

Sample Receipt Checklist

COC Seal Present/Intact:	<input checked="" type="checkbox"/> NP	<input type="checkbox"/> Y	<input type="checkbox"/> N
COC Signed/Accurate:		<input type="checkbox"/> Y	<input type="checkbox"/> N
Bottles arrive intact:		<input type="checkbox"/> Y	<input type="checkbox"/> N
Correct bottles used:		<input type="checkbox"/> Y	<input type="checkbox"/> N
Sufficient volume sent:		<input type="checkbox"/> Y	<input type="checkbox"/> N
If Applicable			
VOA Zero Headspace:		<input type="checkbox"/> Y	<input type="checkbox"/> N
Preservation Correct/Checked:		<input type="checkbox"/> Y	<input type="checkbox"/> N
RAD Screen <0.5 mR/hr:		<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N

Relinquished by: (Signature) <i>[Signature]</i>	Date: 8/29/19	Time: 1:25 PM	Received by: (Signature) <i>[Signature]</i>	Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	HCL/MeOH TBR
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 45.0°C	Bottles Received: 41
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>	Date: 8-30-19	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF 10K

## **Appendix C -**

# **Regulatory Records Documentation (with EDR Database Searches)**

**Clayton Trust Property**

Mitchell Canyon Road

Clayton, CA 94517

Inquiry Number: 5957509.2s

February 03, 2020

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://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

MITCHELL CANYON ROAD  
CLAYTON, CA 94517

#### COORDINATES

Latitude (North): 37.9352440 - 37° 56' 6.87"  
Longitude (West): 121.9439200 - 121° 56' 38.11"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 592806.1  
UTM Y (Meters): 4198950.5  
Elevation: 493 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5640430 CLAYTON, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140606  
Source: USDA



MAPPED SITES SUMMARY

Target Property Address:  
MITCHELL CANYON ROAD  
CLAYTON, CA 94517

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">1</a>		5849 MITCHELL CANYON	RCRA NonGen / NLR	Lower	454, 0.086, NE
<a href="#">A2</a>	ZACK & KIKI TURNIN	1205 AMARANTH DR	RCRA NonGen / NLR	Lower	1057, 0.200, NNW
<a href="#">A3</a>		1211 AMARANTH WAY	RCRA NonGen / NLR	Lower	1141, 0.216, NNW
<a href="#">4</a>	MICHAEL SIBBITT	890 COACHMAN PLACE	RCRA NonGen / NLR	Lower	1150, 0.218, SE
<a href="#">5</a>		1215 AMARANTH WAY	RCRA NonGen / NLR	Lower	1187, 0.225, NNW
<a href="#">6</a>	CEMEX CLAYTON QUARRY	515 MITCHELL CANYON	MINES	Higher	1242, 0.235, South
<a href="#">7</a>	CEMEX	515 MITCHELL CANYON	LUST, AST, CERS HAZ WASTE, SWEEPS UST, CERS TANKS,	Higher	1404, 0.266, SSW
<a href="#">8</a>	KAISER SAND & GRAVEL	2484 PINE HOLLOW RD	LUST, HIST CORTESE, CERS	Lower	2433, 0.461, NW

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System

## EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

### ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR..... EnviroStor Database

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

### ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land  
CPS-SLIC..... Statewide SLIC Cases

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
UST..... Active UST Facilities  
AST..... Aboveground Petroleum Storage Tank Facilities  
INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal voluntary cleanup sites***

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

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Considered Brownfields Sites Listing

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT..... Waste Management Unit Database  
SWRCY..... Recycler Database  
HAULERS..... Registered Waste Tire Haulers Listing  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory

## EXECUTIVE SUMMARY

IHS OPEN DUMPS..... Open Dumps on Indian Land

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... Delisted National Clandestine Laboratory Register  
HIST Cal-Sites..... Historical Calsites Database  
SCH..... School Property Evaluation Program  
CDL..... Clandestine Drug Labs  
CERS HAZ WASTE..... CERS HAZ WASTE  
Toxic Pits..... Toxic Pits Cleanup Act Sites  
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  
CERS TANKS..... California Environmental Reporting System (CERS) Tanks  
CA FID UST..... Facility Inventory Database

### **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

## EXECUTIVE SUMMARY

COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
ECHO.....	Enforcement & Compliance History Information
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
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
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
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
CONTRA COSTA CO. SITE LIST.....	Site List
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

### **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 leaking storage tank lists**

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

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

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>CEMEX</i></b>	<b><i>515 MITCHELL CANYON</i></b>	<b><i>SSW 1/4 - 1/2 (0.266 mi.)</i></b>	<b><i>7</i></b>	<b><i>15</i></b>
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Facility Id: 07-0475 Facility Status: Case Closed Global Id: T0601300439 date9: 1/15/1997				
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>KAISER SAND &amp; GRAVEL</i></b>	<b><i>2484 PINE HOLLOW RD</i></b>	<b><i>NW 1/4 - 1/2 (0.461 mi.)</i></b>	<b><i>8</i></b>	<b><i>54</i></b>
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Facility Id: 07-0595				

## EXECUTIVE SUMMARY

Facility Status: Case Closed  
Global Id: T0601300548  
date9: 3/26/1997

### 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 12/16/2019 has revealed that there are 5 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported EPA ID:: CAC003037185	5849 MITCHELL CANYON	NE 0 - 1/8 (0.086 mi.)	1	9
ZACK & KIKI TURNIN EPA ID:: CAC002994440	1205 AMARANTH DR	NNW 1/8 - 1/4 (0.200 mi.)	A2	10
Not reported EPA ID:: CAC003018221	1211 AMARANTH WAY	NNW 1/8 - 1/4 (0.216 mi.)	A3	11
MICHAEL SIBBITT EPA ID:: CAC002967480	890 COACHMAN PLACE	SE 1/8 - 1/4 (0.218 mi.)	4	12
Not reported EPA ID:: CAC003033922	1215 AMARANTH WAY	NNW 1/8 - 1/4 (0.225 mi.)	5	13

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CEMEX</b> Reg Id: 07-0475	<b>515 MITCHELL CANYON</b>	<b>SSW 1/4 - 1/2 (0.266 mi.)</b>	<b>7</b>	<b>15</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAISER SAND &amp; GRAVEL</b> Reg Id: 07-0595	<b>2484 PINE HOLLOW RD</b>	<b>NW 1/4 - 1/2 (0.461 mi.)</b>	<b>8</b>	<b>54</b>

## EXECUTIVE SUMMARY

MINES: A listing of mine site locations from the Office of Mine Reclamation.

A review of the MINES list, as provided by EDR, and dated 09/09/2019 has revealed that there is 1 MINES site within approximately 0.25 miles of the target property.

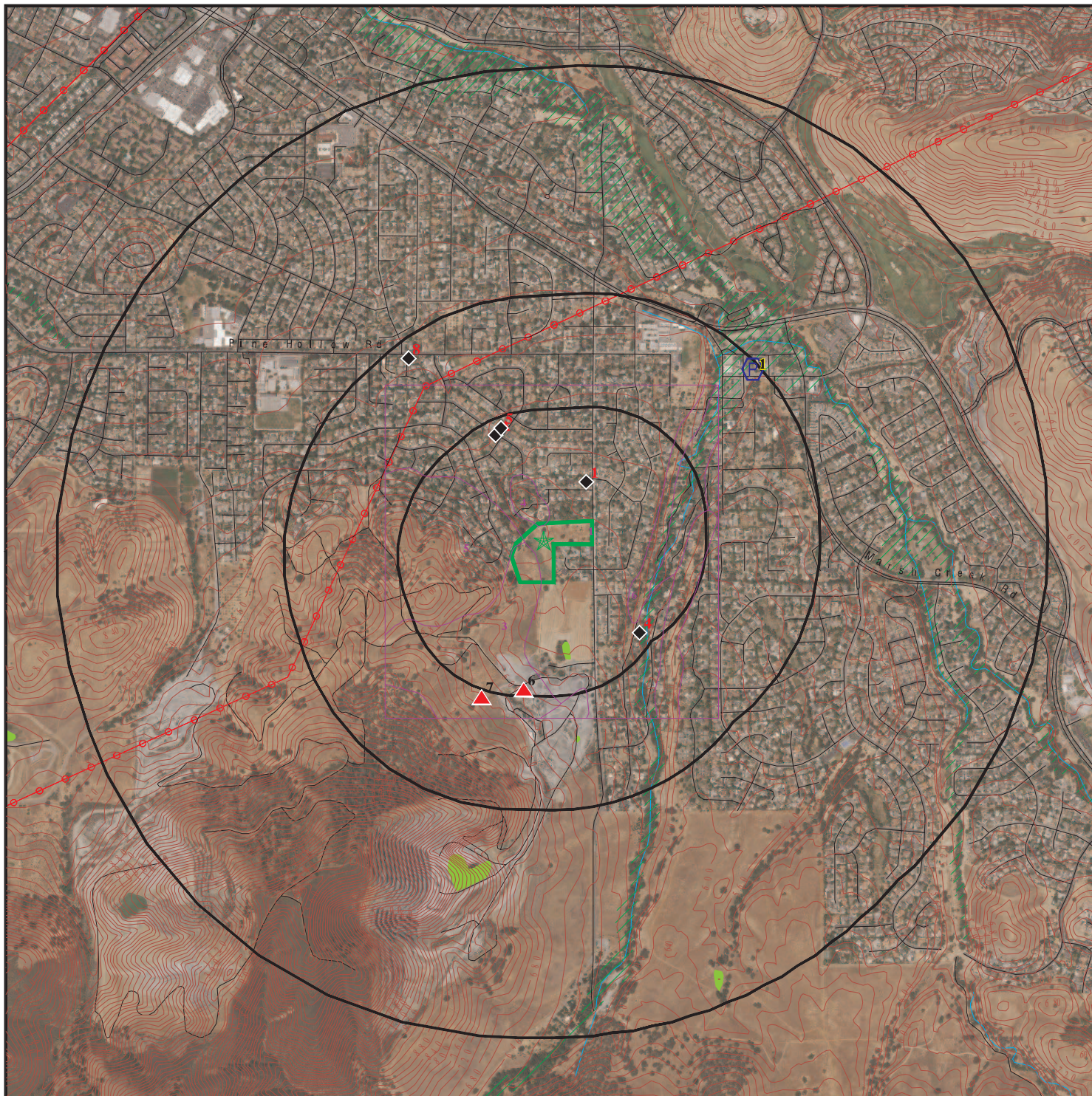
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CEMEX CLAYTON QUARRY	515 MITCHELL CANYON	S 1/8 - 1/4 (0.235 mi.)	6	15




## EXECUTIVE SUMMARY


There were no unmapped sites in this report.

# OVERVIEW MAP - 5957509.2S



 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

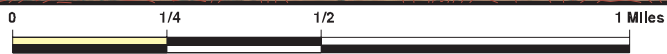
 Special Flood Hazard Area (1%)

 0.2% Annual Chance Flood Hazard

 National Wetland Inventory

 State Wetlands

 Areas of Concern

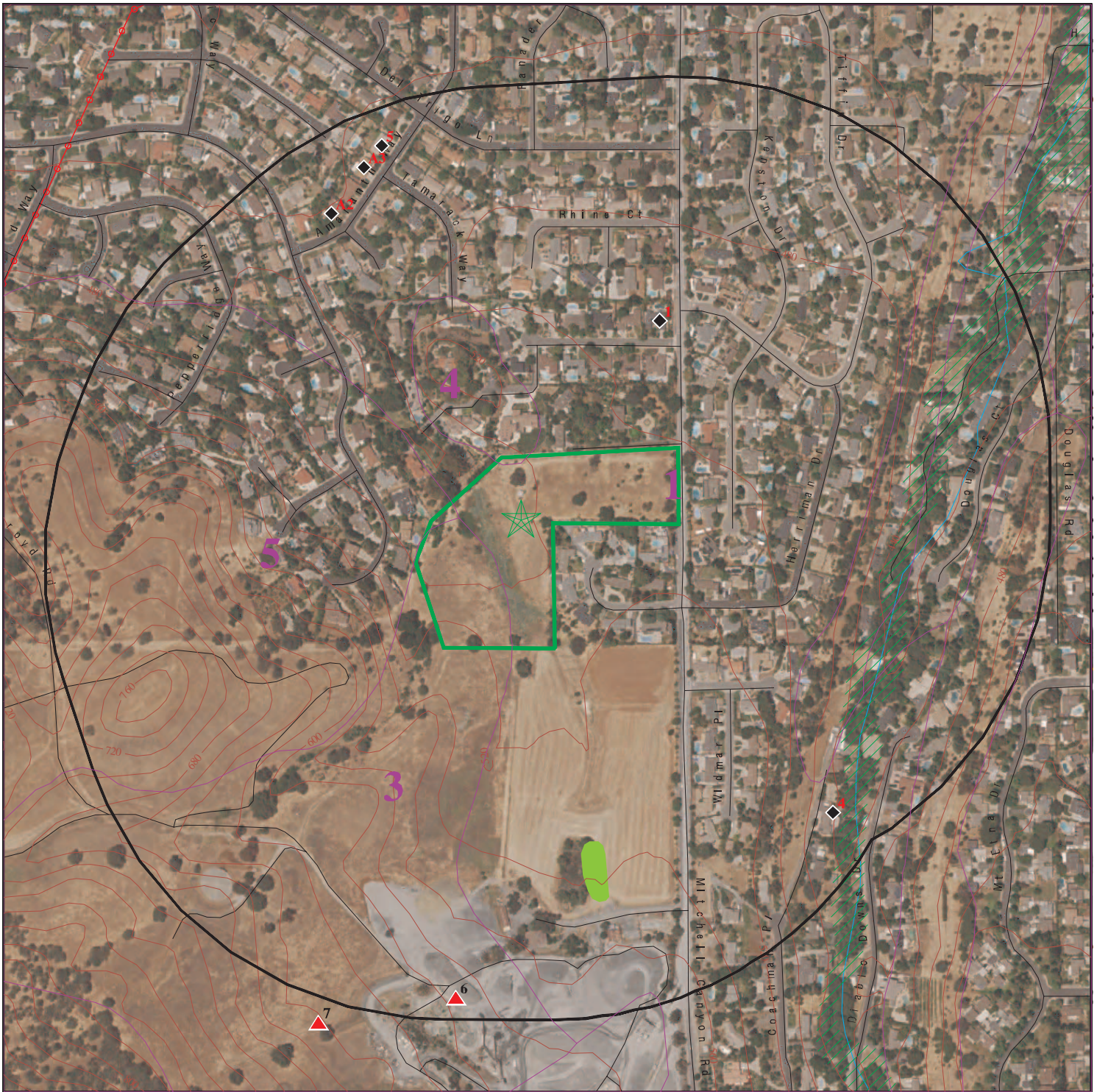


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton CA 94517  
 LAT/LONG: 37.935244 / 121.94392

CLIENT: AdvancedGeo, Inc.  
 CONTACT: Diane Becker  
 INQUIRY #: 5957509.2s  
 DATE: February 03, 2020 1:26 pm

# DETAIL MAP - 5957509.2S



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

Power transmission lines

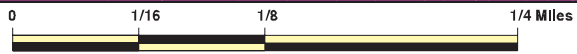
Special Flood Hazard Area (1%)

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: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton CA 94517  
 LAT/LONG: 37.935244 / 121.94392

CLIENT: AdvancedGeo, Inc.  
 CONTACT: Diane Becker  
 INQUIRY #: 5957509.2s  
 DATE: February 03, 2020 1:29 pm

## 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
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
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
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
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
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL RESPONSE</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i></b>								
ENVIROSTOR	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		0	0	2	NR	NR	2

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<b><i>State and tribal registered storage tank lists</i></b>								
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
<b><i>State and tribal voluntary cleanup sites</i></b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b><i>State and tribal Brownfields sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Registered Storage Tanks</i></b>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
<b><i>Local Land Records</i></b>								
LIENS	0.001		0	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		1	4	NR	NR	NR	5
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0



## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 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  
NE  
< 1/8  
0.086 mi.  
454 ft.

5849 MITCHELL CANYON CT  
CLAYTON, CA 94517

RCRA NonGen / NLR 1025856827  
CAC003037185

Relative:  
Lower

RCRA NonGen / NLR:

Actual:  
490 ft.

Date form received by agency: 2019-10-04 00:00:00.0  
Facility name: Not reported  
Facility address: 5849 MITCHELL CANYON CT  
CLAYTON, CA 94517-1334  
EPA ID: CAC003037185  
Contact: TERRI HIGHSMITH  
Contact address: 5849 MITCHELL CANYON CT  
CLAYTON, CA 94517-1334  
Contact country: Not reported  
Contact telephone: 213-399-9292  
Contact email: HAYWARD.RECEPTIONIST@SYNERGYCOMPANIES.OR  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: TERRI HIGHSMITH  
Owner/operator address: 5849 MITCHELL CANYON CT  
CLAYTON, CA 94517

Owner/operator country: Not reported  
Owner/operator telephone: 213-399-9292  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: TERRI HIGHSMITH  
Owner/operator address: 5849 MITCHELL CANYON CT  
CLAYTON, CA 94517

Owner/operator country: Not reported  
Owner/operator telephone: 213-399-9292  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): Not reported  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

(Continued)

1025856827

Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

A2  
NNW  
1/8-1/4  
0.200 mi.  
1057 ft.

**ZACK & KIKI TURNIN**  
**1205 AMARANTH DR**  
**CONCORD, CA 94521**  
**Site 1 of 2 in cluster A**

RCRA NonGen / NLR 1024774518  
CAC002994440

Relative:  
Lower

RCRA NonGen / NLR:

Actual:  
463 ft.

Date form received by agency: 2018-12-27 00:00:00.0  
Facility name: ZACK & KIKI TURNIN  
Facility address: 1205 AMARANTH DR  
CONCORD, CA 94521  
EPA ID: CAC002994440  
Contact: ZACK & KIKI TURNIN  
Contact address: 1205 AMARANTH DR  
CONCORD, CA 94521  
Contact country: Not reported  
Contact telephone: 925-914-1336  
Contact email: ELIZABETH.GARCIA@SYNERGYCOMPANIES.ORG  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ZACK & KIKI TURNIN  
Owner/operator address: 1205 AMARANTH DR  
CONCORD, CA 94521  
Owner/operator country: Not reported  
Owner/operator telephone: 925-914-1336  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: ZACK & KIKI TURNIN  
Owner/operator address: 1205 AMARANTH DR  
CONCORD, CA 94521  
Owner/operator country: Not reported  
Owner/operator telephone: 925-914-1336  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ZACK & KIKI TURNIN (Continued)**

**1024774518**

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

**A3**  
**NNW**  
**1/8-1/4**  
**0.216 mi.**  
**1141 ft.**

**1211 AMARANTH WAY**  
**CONCORD, CA 94521**  
**Site 2 of 2 in cluster A**

**RCRA NonGen / NLR 1025838625**  
**CAC003018221**

**Relative:**  
**Lower**  
**Actual:**  
**464 ft.**

RCRA NonGen / NLR:  
Date form received by agency: 2019-06-05 00:00:00.0  
Facility name: Not reported  
Facility address: 1211 AMARANTH WAY  
CONCORD, CA 94521  
EPA ID: CAC003018221  
Contact: KENNETH PAARDEKOOOPER  
Contact address: 1211 AMARANTH WAY  
CONCORD, CA 94521  
Contact country: Not reported  
Contact telephone: 925-490-3854  
Contact email: MELISA@ENV-REM.COM  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: KENNETH PAARDEKOOOPER  
Owner/operator address: 1211 AMARANTH WAY  
CONCORD, CA 94521  
Owner/operator country: Not reported  
Owner/operator telephone: 925-490-3854  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported  
Owner/operator name: KENNETH PAARDEKOOOPER  
Owner/operator address: 1211 AMARANTH WAY  
CONCORD, CA 94521

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

(Continued)

1025838625

Owner/operator country: Not reported  
Owner/operator telephone: 925-490-3854  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: Yes  
Treater, storer or disposer of HW: Yes  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

4  
SE  
1/8-1/4  
0.218 mi.  
1150 ft.

**MICHAEL SIBBITT**  
**890 COACHMAN PLACE**  
**CLAYTON, CA 94517**

RCRA NonGen / NLR 1024747703  
CAC002967480

Relative:  
Lower  
Actual:  
462 ft.

RCRA NonGen / NLR:  
Date form received by agency: 2018-06-20 00:00:00.0  
Facility name: MICHAEL SIBBITT  
Facility address: 890 COACHMAN PLACE  
CLAYTON, CA 94517  
EPA ID: CAC002967480  
Contact: MICHAEL SIBBITT  
Contact address: 890 COACHMAN PLACE  
CLAYTON, CA 94517  
Contact country: Not reported  
Contact telephone: 925-323-8667  
Contact email: NICOLE@ENV-REM.COM  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: MICHAEL SIBBITT  
Owner/operator address: 890 COACHMAN PLACE  
CLAYTON, CA 94517  
Owner/operator country: Not reported  
Owner/operator telephone: 925-323-8667  
Owner/operator email: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MICHAEL SIBBITT (Continued)**

**1024747703**

Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: MICHAEL SIBBITT  
Owner/operator address: 890 COACHMAN PLACE  
CLAYTON, CA 94517

Owner/operator country: Not reported  
Owner/operator telephone: 925-323-8667  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: Yes  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

5  
NNW  
1/8-1/4  
0.225 mi.  
1187 ft.

1215 AMARANTH WAY  
CONCORD, CA 94521

RCRA NonGen / NLR 1025853705  
CAC003033922

Relative:  
Lower  
Actual:  
465 ft.

RCRA NonGen / NLR:  
Date form received by agency: 2019-09-13 00:00:00.0  
Facility name: Not reported  
Facility address: 1215 AMARANTH WAY  
CONCORD, CA 94521  
EPA ID: CAC003033922  
Contact: AMY CESARIN  
Contact address: 1215 AMARANTH WAY  
CONCORD, CA 94521  
Contact country: Not reported  
Contact telephone: 650-796-2189  
Contact email: SHACARRAHENDERSON@ALLIANCE-ENVIRO.COM  
EPA Region: 09

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

(Continued)

1025853705

Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: AMY CESARIN  
Owner/operator address: 1215 AMARANTH WAY  
CONCORD, CA 94521  
Owner/operator country: Not reported  
Owner/operator telephone: 650-796-2189  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: AMY CESARIN  
Owner/operator address: 1215 AMARANTH WAY  
CONCORD, CA 94521  
Owner/operator country: Not reported  
Owner/operator telephone: 650-796-2189  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Other  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): Not reported  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**6**  
**South**  
**1/8-1/4**  
**0.235 mi.**  
**1242 ft.**

**CEMEX CLAYTON QUARRY**  
**515 MITCHELL CANYON ROAD**  
**, CA**

**MINES** **S117661278**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**595 ft.**

**MINES:**  
 Name: CEMEX CLAYTON QUARRY  
 Address: 515 MITCHELL CANYON ROAD  
 City,State,Zip: CA  
 Latitude: 37.930556  
 Longitude: -121.944722  
 Lead Agency identification code: 7  
 Lead Agency name: County of Contra Costa  
 Year of the operator supplied annual report: 2017  
 Type of report submitted by operator: 2  
 Number of acres disturbed by the mine: 130  
 Status of mining operation: ACTIVE  
 Status of mine reclamation: RECLAMATION IN PROGRESS  
 Mine operator: CEMEX CONSTRUCTION MATERIALS PACIFIC  
 Operator Address: 1764 SKYWAY  
 Operator City, State, Zip: CHICO, CA 95928  
 Operator County: Not reported  
 Mine owner: CEMEX  
 Owner Address: 5180 GOLDEN FOOTHILL PARKWAY, SUITE 220  
 Owner City, State, Zip: EL DORADO HILLS, CA 95762  
 Owner County: Not reported  
 Reclamation plan identification number: Not reported  
 Primary product produced by the mine: SAND AND GRAVEL  
 Other products produced by the mine: Not reported  
 Type of mining utilized by mine: PLANT OR MILL,QUARRY  
 Conditional use permit identification number: LUP2054-81  
 Number of acres permitted for mining disturbance: 437  
 Total amount of funds posted by the mine for reclamation: 4730408  
 Financial Assurance Cost Estimate for reclamation: 5645447

**7**  
**SSW**  
**1/4-1/2**  
**0.266 mi.**  
**1404 ft.**

**CEMEX**  
**515 MITCHELL CANYON RD**  
**CLAYTON, CA 94517**

**LUST** **S105023307**  
**AST** **N/A**  
**CERS HAZ WASTE**  
**SWEEPS UST**  
**CERS TANKS**  
**EMI**  
**HIST CORTESE**  
**NPDES**  
**CONTRA COSTA CO. SITE LIST**  
**CIWQS**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**643 ft.**

**LUST:**  
 Name: RMC LONESTAR  
 Address: 515 MITCHELL CANYON RD  
 City,State,Zip: CLAYTON, CA 94517  
 Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0601300439](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0601300439)  
 Global Id: T0601300439  
 Latitude: 37.932159  
 Longitude: -121.940987  
 Status: Completed - Case Closed  
 Status Date: 01/15/1997

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Case Worker: KEB  
RB Case Number: 07-0475  
Local Agency: CONTRA COSTA COUNTY  
File Location: Not reported  
Local Case Number: 11077  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

LUST:

Global Id: T0601300439  
Contact Type: Regional Board Caseworker  
Contact Name: KEVIN BROWN  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: kebrown@waterboards.ca.gov  
Phone Number: Not reported

Global Id: T0601300439  
Contact Type: Local Agency Caseworker  
Contact Name: SUE LOYD  
Organization Name: CONTRA COSTA COUNTY  
Address: 4333 PACHECO BLVD.  
City: MARTINEZ  
Email: sloyd@hds.co.contra-costa.ca.us  
Phone Number: Not reported

LUST:

Global Id: T0601300439  
Action Type: Other  
Date: 06/27/1990  
Action: Leak Stopped

Global Id: T0601300439  
Action Type: Other  
Date: 06/27/1990  
Action: Leak Reported

Global Id: T0601300439  
Action Type: ENFORCEMENT  
Date: 01/14/1996  
Action: 13267 Requirement

Global Id: T0601300439  
Action Type: Other  
Date: 06/27/1990  
Action: Leak Discovery

LUST:

Global Id: T0601300439  
Status: Open - Case Begin Date  
Status Date: 06/27/1990

Global Id: T0601300439  
Status: Open - Site Assessment  
Status Date: 05/10/1994



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Global Id: T0601300439  
Status: Completed - Case Closed  
Status Date: 01/15/1997

**LUST REG 2:**

Region: 2  
Facility Id: 07-0475  
Facility Status: Case Closed  
Case Number: 11077  
How Discovered: Tank Closure  
Leak Cause: UNK  
Leak Source: UNK  
Date Leak Confirmed: 5/10/1994  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: Not reported  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**AST:**

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC LLC  
Address: 515 MITCHELL CANYON RD  
City/Zip: CLAYTON,  
Certified Unified Program Agencies: Contra Costa  
Owner: Not reported  
Total Gallons: 11,500  
CERSID: Not reported  
Facility ID: Not reported  
Business Name: Not reported  
Phone: Not reported  
Fax: Not reported  
Mailing Address: Not reported  
Mailing Address City: Not reported  
Mailing Address State: Not reported  
Mailing Address Zip Code: Not reported  
Operator Name: Not reported  
Operator Phone: Not reported  
Owner Phone: Not reported  
Owner Mail Address: Not reported  
Owner State: Not reported  
Owner Zip Code: Not reported  
Owner Country: Not reported  
Property Owner Name: Not reported  
Property Owner Phone: Not reported  
Property Owner Mailing Address: Not reported  
Property Owner City: Not reported  
Property Owner Stat : Not reported  
Property Owner Zip Code: Not reported  
Property Owner Country: Not reported  
EPAID: Not reported

Name: CEMEX  
Address: 515 MITCHELL CANYON RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

City/Zip: CLAYTON,94517  
Certified Unified Program Agencies: Not reported  
Owner: CEMEX Construction Materials Pacific, LLC  
Total Gallons: Not reported  
CERSID: 10005676  
Facility ID: 07-000-711077  
Business Name: CEMEX Construction Materials Pacific, LLC  
Phone: 925-672-4900  
Fax: 925-672-1845  
Mailing Address: 5180 Golden Foothill Parkway, Suite 200  
Mailing Address City: El Dorado Hills  
Mailing Address State: CA  
Mailing Address Zip Code: 95762  
Operator Name: CEMEX Construction Materials Pacific, LLC  
Operator Phone: 925-672-4900  
Owner Phone: 916-941-2800  
Owner Mail Address: 5180 Golden Foothill Parkway, Suite 200  
Owner State: CA  
Owner Zip Code: 95762  
Owner Country: United States  
Property Owner Name: CEMEX Construction Materials Pacific, LLC  
Property Owner Phone: 916-941-2800  
Property Owner Mailing Address: 5180 Golden Foothill Parkway, Suite 200  
Property Owner City: El Dorado Hills  
Property Owner Stat : CA  
Property Owner Zip Code: 95762  
Property Owner Country: United States  
EPAID: CAL000317868

**CERS HAZ WASTE:**

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 103985  
CERS ID: 10005676  
CERS Description: Hazardous Waste Generator

**SWEEPS UST:**

Name: RMC LONE STAR CLAYTON PLANT  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Status: Not reported  
Comp Number: 11077  
Number: Not reported  
Board Of Equalization: 44-002167  
Referral Date: Not reported  
Action Date: Not reported  
Created Date: Not reported  
Owner Tank Id: Not reported  
SWRCB Tank Id: 07-000-011077-000001  
Tank Status: Not reported  
Capacity: 10000  
Active Date: Not reported  
Tank Use: M.V. FUEL  
STG: PRODUCT  
Content: DIESEL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Number Of Tanks: 3

Name: RMC LONE STAR CLAYTON PLANT  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Status: Not reported  
Comp Number: 11077  
Number: Not reported  
Board Of Equalization: 44-002167  
Referral Date: Not reported  
Action Date: Not reported  
Created Date: Not reported  
Owner Tank Id: Not reported  
SWRCB Tank Id: 07-000-011077-000002  
Tank Status: Not reported  
Capacity: 1000  
Active Date: Not reported  
Tank Use: OIL  
STG: WASTE  
Content: WASTE OIL  
Number Of Tanks: Not reported

Name: RMC LONE STAR CLAYTON PLANT  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Status: Not reported  
Comp Number: 11077  
Number: Not reported  
Board Of Equalization: 44-002167  
Referral Date: Not reported  
Action Date: Not reported  
Created Date: Not reported  
Owner Tank Id: Not reported  
SWRCB Tank Id: 07-000-011077-000003  
Tank Status: Not reported  
Capacity: 500  
Active Date: Not reported  
Tank Use: OIL  
STG: WASTE  
Content: WASTE OIL  
Number Of Tanks: Not reported

**CERS TANKS:**

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 103985  
CERS ID: 10005676  
CERS Description: Aboveground Petroleum Storage

**EMI:**

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 1999  
County Code: 7

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1442  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 17  
Part. Matter 10 Micrometers and Smllr Tons/Yr:9

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2000  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1442  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 17  
Part. Matter 10 Micrometers and Smllr Tons/Yr:9

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2001  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1442  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Y  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22  
Part. Matter 10 Micrometers and Smllr Tons/Yr:11

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

City,State,Zip: CLAYTON, CA 94517  
Year: 2002  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22  
Part. Matter 10 Micrometers and Smlr Tons/Yr:11

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2003  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22  
Part. Matter 10 Micrometers and Smlr Tons/Yr:11

Name: RMC PACIFIC MATERIALS INC, A D  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2004  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.09  
Reactive Organic Gases Tons/Yr: 0.0794526  
Carbon Monoxide Emissions Tons/Yr: 0.176  
NOX - Oxides of Nitrogen Tons/Yr: 0.807  
SOX - Oxides of Sulphur Tons/Yr: 0.013  
Particulate Matter Tons/Yr: 22.963  
Part. Matter 10 Micrometers and Smlr Tons/Yr:11.3425397

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2005  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .028  
Reactive Organic Gases Tons/Yr: .0275772  
Carbon Monoxide Emissions Tons/Yr: .005  
NOX - Oxides of Nitrogen Tons/Yr: .021  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 26.619  
Part. Matter 10 Micrometers and Smlr Tons/Yr:13.1166714

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2006  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .097  
Reactive Organic Gases Tons/Yr: .0853095  
Carbon Monoxide Emissions Tons/Yr: .196  
NOX - Oxides of Nitrogen Tons/Yr: .903  
SOX - Oxides of Sulphur Tons/Yr: .014  
Particulate Matter Tons/Yr: 26.984  
Part. Matter 10 Micrometers and Smlr Tons/Yr:13.3291594

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2007  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .097  
Reactive Organic Gases Tons/Yr: .0853095  
Carbon Monoxide Emissions Tons/Yr: .196  
NOX - Oxides of Nitrogen Tons/Yr: .903  
SOX - Oxides of Sulphur Tons/Yr: .014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Particulate Matter Tons/Yr: 26.984  
Part. Matter 10 Micrometers and Smllr Tons/Yr:13.3291594

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2008  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .083  
Reactive Organic Gases Tons/Yr: .0735957  
Carbon Monoxide Emissions Tons/Yr: .153  
NOX - Oxides of Nitrogen Tons/Yr: .704  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 42.965  
Part. Matter 10 Micrometers and Smllr Tons/Yr:20.9233914

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2009  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 7.2999999999999995E-2  
Reactive Organic Gases Tons/Yr: 6.5228700000000001E-2  
Carbon Monoxide Emissions Tons/Yr: 0.14299999999999999  
NOX - Oxides of Nitrogen Tons/Yr: 0.65700000000000003  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 22.151155737704901  
Part. Matter 10 Micrometers and Smllr Tons/Yr:10.9822554

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2010  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 6.5000000000000002E-2  
Reactive Organic Gases Tons/Yr: 0.0585351

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Carbon Monoxide Emissions Tons/Yr: 0.11700000000000001  
NOX - Oxides of Nitrogen Tons/Yr: 0.54000000000000004  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 36.822959016393398  
Part. Matter 10 Micrometers and Smlr Tons/Yr:17.458028899999999

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2011  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.026  
Reactive Organic Gases Tons/Yr: 0.0259038  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2012  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.026  
Reactive Organic Gases Tons/Yr: 0.0259038  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 20.570060313  
Part. Matter 10 Micrometers and Smlr Tons/Yr:9.435

Name: CEMEX CONSTRUCTION MATERIALS P  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2013  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.026  
Reactive Organic Gases Tons/Yr: 0.026  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 21.046  
Part. Matter 10 Micrometers and Smlr Tons/Yr:10.523

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2014  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.02634999  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 18.464724282  
Part. Matter 10 Micrometers and Smlr Tons/Yr:9.232362244

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2015  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.01834999  
Reactive Organic Gases Tons/Yr: 0.01835  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 16.365857189  
Part. Matter 10 Micrometers and Smlr Tons/Yr:8.182928511

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2016  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.018349992  
Reactive Organic Gases Tons/Yr: 0.018349992  
Carbon Monoxide Emissions Tons/Yr: Not reported  
NOX - Oxides of Nitrogen Tons/Yr: Not reported  
SOX - Oxides of Sulphur Tons/Yr: Not reported  
Particulate Matter Tons/Yr: 15.49322988  
Part. Matter 10 Micrometers and Smlr Tons/Yr:7.746615023

Name: CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Year: 2017  
County Code: 7  
Air Basin: SF  
Facility ID: 828  
Air District Name: BA  
SIC Code: 1422  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.018349992  
Reactive Organic Gases Tons/Yr: 0.018349992  
Carbon Monoxide Emissions Tons/Yr: Not reported  
NOX - Oxides of Nitrogen Tons/Yr: Not reported  
SOX - Oxides of Sulphur Tons/Yr: Not reported  
Particulate Matter Tons/Yr: 14.681012878  
Part. Matter 10 Micrometers and Smlr Tons/Yr:7.34050652

**HIST CORTESE:**

edr\_fname: RMC LONESTAR  
edr\_fadd1: 515 MITCHELL CNYN  
City,State,Zip: CLAYTON, CA 94517  
Region: CORTESE  
Facility County Code: 7  
Reg By: LTNKA  
Reg Id: 07-0475

**NPDES:**

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Facility Status: Active  
NPDES Number: CAS000001  
Region: 2  
Agency Number: 0  
Regulatory Measure ID: 181849  
Place ID: Not reported  
Order Number: 97-03-DWQ  
WDID: 2 071009447  
Regulatory Measure Type: Enrollee  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Effective Date Of Regulatory Measure: 11/23/1992  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: 2365 Iron Point Road Suite 120  
Discharge Name: CEMEX  
Discharge City: Folsom  
Discharge State: California  
Discharge Zip: 95630  
Status: Not reported  
Status Date: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported

NPDES as of 03/2018:  
NPDES Number: CAS000001  
Status: Active  
Agency Number: 0  
Region: 2  
Regulatory Measure ID: 181849  
Order Number: 97-03-DWQ  
Regulatory Measure Type: Enrollee  
Place ID: Not reported  
WDID: 2 07I009447  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 11/23/1992  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: CEMEX  
Discharge Address: 2365 Iron Point Road Suite 120  
Discharge City: Folsom  
Discharge State: California  
Discharge Zip: 95630  
Received Date: Not reported  
Processed Date: Not reported  
Status: Not reported  
Status Date: Not reported  
Place Size: Not reported  
Place Size Unit: Not reported  
Contact: Not reported  
Contact Title: Not reported  
Contact Phone: Not reported  
Contact Phone Ext: Not reported  
Contact Email: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported  
Operator Contact: Not reported  
Operator Contact Title: Not reported  
Operator Contact Phone: Not reported  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: Not reported  
Operator Type: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	181849
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 07I009447
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	11/23/1992
Status:	Active

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Status Date: 11/23/1992  
Place Size: 217  
Place Size Unit: Acres  
Contact: Ramon Neilson  
Contact Title: Plant Manager  
Contact Phone: 559-471-5581  
Contact Phone Ext: Not reported  
Contact Email: ramon.neilson@cemex.com  
Operator Name: CEMEX  
Operator Address: 5180 Golden Foothill Parkway  
Operator City: El Dorado Hills  
Operator State: California  
Operator Zip: 95762  
Operator Contact: Bruce Eppler  
Operator Contact Title: Environmental Manager  
Operator Contact Phone: 916-941-2920  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: bruceh.eppler@cemex.com  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Stormwater to Suisun Bay  
Certifier: Brian Mastin  
Certifier Title: VP OF OPERATIVE SUPPORT  
Certification Date: 31-AUG-15  
Primary Sic: 1442-Construction Sand and Gravel  
Secondary Sic: 1429-Crushed and Broken Stone, NEC  
Tertiary Sic: Not reported

Name: CEMEX  
Address: 515 MITCHELL CANYON RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

City,State,Zip:	CLAYTON, CA 94517
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	2 071009447
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	11/23/1992
Operator Name:	CEMEX
Operator Address:	2365 Iron Point Road Suite 120
Operator City:	Folsom
Operator State:	California
Operator Zip:	95630
NPDES as of 03/2018:	
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	2
Regulatory Measure ID:	181849
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 071009447
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/23/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	CEMEX
Discharge Address:	2365 Iron Point Road Suite 120
Discharge City:	Folsom
Discharge State:	California
Discharge Zip:	95630
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	181849
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 07I009447
Program Type:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	11/23/1992
Status:	Active
Status Date:	11/23/1992
Place Size:	217
Place Size Unit:	Acres
Contact:	Ramon Neilson
Contact Title:	Plant Manager
Contact Phone:	559-471-5581
Contact Phone Ext:	Not reported
Contact Email:	ramon.neilson@cemex.com
Operator Name:	CEMEX
Operator Address:	5180 Golden Foothill Parkway
Operator City:	El Dorado Hills
Operator State:	California
Operator Zip:	95762
Operator Contact:	Bruce Eppler
Operator Contact Title:	Environmental Manager
Operator Contact Phone:	916-941-2920
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	bruceh.eppler@cemex.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Dir Discharge Uswater Ind: N  
Receiving Water Name: Stormwater to Suisun Bay  
Certifier: Brian Mastin  
Certifier Title: VP OF OPERATIVE SUPPORT  
Certification Date: 31-AUG-15  
Primary Sic: 1442-Construction Sand and Gravel  
Secondary Sic: 1429-Crushed and Broken Stone, NEC  
Tertiary Sic: Not reported

**CONTRA COSTA CO. SITE LIST:**

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: INACTIVE, NON-BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: UNDERGROUND STORAGE TANK SITE  
Region: CONTRA COSTA  
Cupa Number: 711077

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: ACTIVE, BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: APSA: 10K - <100K GALLONS  
Region: CONTRA COSTA  
Cupa Number: 711077

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: ACTIVE, BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: HMBP: >100K-250K LBS, 0-19 EMPLOYEES  
Region: CONTRA COSTA  
Cupa Number: 711077

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City: CLAYTON  
Facility ID: FA0031598  
Billing Status: ACTIVE, BILLABLE  
Program Status: CONTRA COSTA CO. SITE LIST  
Program/Elements: HWG: LESS THAN 5 TONS/YEAR  
Region: CONTRA COSTA  
Cupa Number: 711077

**CIWQS:**

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Agency: CEMEX

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Agency Address: 2365 Iron Point Road Suite 120, Folsom, CA 95630  
Place/Project Type: Industrial - Construction Sand and Gravel  
SIC/NAICS: 1442(+)  
Region: 2  
Program: INDSTW  
Regulatory Measure Status: Active  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 2 071009447  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 11/23/1992  
Termination Date: Not reported  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 2  
Latitude: 37.9335  
Longitude: -121.94191

**CERS:**

Name: RMC LONESTAR  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 215748  
CERS ID: T0601300439  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: SUE LOYD - CONTRA COSTA COUNTY  
Entity Title: Not reported  
Affiliation Address: 4333 PACHECO BLVD.  
Affiliation City: MARTINEZ  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: KEVIN BROWN - SAN FRANCISCO BAY RWQCB (REGION 2)  
Entity Title: Not reported  
Affiliation Address: 1515 CLAY STREET, SUITE 1400  
Affiliation City: OAKLAND  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: CEMEX - CLAYTON QUARRY  
Address: 515 MITCHELL CANYON ROAD  
City,State,Zip: CLAYTON, CA 94517-1529  
Site ID: 458437

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

CERS ID: 110005972956  
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc: Facility Owner  
Entity Name: CEMEX CONSTRUCTION MATL PACIFIC LLC  
Entity Title: OWNER  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAY  
Affiliation City: ELDORADOHILLS  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: LOUIS B SCHIPPER  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: ROBERT ALDENHUYSEN  
Entity Title: ENVIRONMENTAL CONTACT  
Affiliation Address: POBOX 697  
Affiliation City: PLEASANTON  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: CEMEX CONSTRCTN MATL PACIFICNA LLC  
Entity Title: Not reported  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAYNA SUITE 200  
Affiliation City: ELDORADOHILLS  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Bruce Eppler  
Entity Title: Not reported  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAYNA SUITE 200  
Affiliation City: ELDORADOHILLS  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: GORDON BROWN  
Entity Title: OPERATIONS MANAGER  
Affiliation Address: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: RAMON NEILSON  
Entity Title: PLANT MANAGER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: CEMEX CONSTRCTN MATL PACIFIC LLC  
Entity Title: OPERATOR  
Affiliation Address: POBOX 697  
Affiliation City: PLEASANTON  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: RICK HANCOCK  
Entity Title: PLANT MANAGER  
Affiliation Address: 5180 GOLDEN FOOTHILL PARKWAY  
Affiliation City: ELDORADOHILLS  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 103985  
CERS ID: 10005676  
CERS Description: Chemical Storage Facilities

Violations:  
Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS  
  
Site ID: 103985

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to implement the SPCC Plan.  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple  
Violation Description: APSA Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SWPPP  
Violation Notes: SWPP does not include the truck wash station located just outside the entrance to the facility. In addition, the site map is out of date.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017. hsc25505(a)(2), hsc 25507  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HMRRP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections  
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: No BMPs for truck wash station: off site drainage of sediment material to Mitchell Canyon Road drainage ditch at 515 Mitchell Canyon Road, Clayton  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-28-2018  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: The site map is out of date and does not include all of the required elements of IGP section X.E and section X.H.  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

**Enforcement Action:**

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 02-05-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

**Coordinates:**

Site ID: 103985  
Facility Name: CEMEX  
Env Int Type Code: SMSWIND  
Program ID: 254432  
Coord Name: Not reported  
Ref Point Type Desc: Unknown  
Latitude: 37.933500  
Longitude: -121.941910

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: Saria Soriano  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator  
Entity Name: CEMEX  
Entity Title: Operator  
Affiliation Address: 2365 Iron Point Road Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: CUPA District  
Entity Name: Contra Costa County Health Services Department  
Entity Title: Not reported  
Affiliation Address: 4585 Pacheco Blvd Suite 100  
Affiliation City: Martinez  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94553  
Affiliation Phone: (925) 335-3200

Affiliation Type Desc: Identification Signer  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Environmental Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer  
Entity Name: Erin Loza  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Operator  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (925) 672-4900

Name: CEMEX  
Address: 515 MITCHELL CANYON RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 103985  
CERS ID: 254432  
CERS Description: Industrial Facility Storm Water

Violations:  
Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to implement the SPCC Plan.  
Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple  
Violation Description: APSA Program - Administration/Documentation - General

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Violation Notes: Returned to compliance on 01/04/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 01-05-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SWPPP  
Violation Notes: SWPP does not include the truck wash station located just outside the entrance to the facility. In addition, the site map is out of date.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/04/2017. hsc25505(a)(2), hsc 25507  
Violation Division: Contra Costa County Health Services Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Violation Program: HMRRP  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: "Failure to amend the SPCC Plan within 6 months: 1. When the facility has had a change in design, construction, operation, or maintenance which affects the facility's discharge potential. AND/OR 2. To include more effective proven technology at the time of the 5-year SPCC Plan review and evaluation."  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 11-28-2016  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to include in the SPCC Plan an adequate facility diagram, or no facility diagram included. The facility diagram is not required on a Tier I qualified facility SPCC Plan.  
Violation Notes: Returned to compliance on 01/27/2017.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-05-2015  
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections  
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 02/05/2015.  
Violation Division: Contra Costa County Health Services Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Violation Date: 02-28-2018  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: No BMPs for truck wash station: off site drainage of sediment material to Mitchell Canyon Road drainage ditch at 515 Mitchell Canyon Road, Clayton  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-28-2018  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: The site map is out of date and does not include all of the required elements of IGP section X.E and section X.H.  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 02-14-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-05-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: APSA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Eval Source: CERS  
  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-28-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Contra Costa County Health Services Department  
Eval Program: HW  
Eval Source: CERS

**Enforcement Action:**

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 01-05-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 02-05-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Enf Action Program: HW  
Enf Action Source: CERS  
  
Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 103985  
Site Name: CEMEX  
Site Address: 515 MITCHELL CANYON RD  
Site City: CLAYTON  
Site Zip: 94517  
Enf Action Date: 11-28-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Contra Costa County Health Services Department  
Enf Action Program: HW  
Enf Action Source: CERS

**Coordinates:**

Site ID: 103985  
Facility Name: CEMEX  
Env Int Type Code: SMSWIND  
Program ID: 254432  
Coord Name: Not reported  
Ref Point Type Desc: Unknown  
Latitude: 37.933500  
Longitude: -121.941910

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: Saria Soriano  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CEMEX (Continued)**

**S105023307**

Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator  
Entity Name: CEMEX  
Entity Title: Operator  
Affiliation Address: 2365 Iron Point Road Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Cemex Construction Materials Pacific, LLC  
Entity Title: Not reported  
Affiliation Address: 2365 Iron Point Road, Suite 120  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (916) 941-2800

Affiliation Type Desc: CUPA District  
Entity Name: Contra Costa County Health Services Department  
Entity Title: Not reported  
Affiliation Address: 4585 Pacheco Blvd Suite 100  
Affiliation City: Martinez  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94553  
Affiliation Phone: (925) 335-3200

Affiliation Type Desc: Identification Signer  
Entity Name: Rosa Fibla Matamoros  
Entity Title: Environmental Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CEMEX (Continued)**

**S105023307**

Affiliation Type Desc: Document Preparer  
 Entity Name: Erin Loza  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
 Entity Name: Mailing Address  
 Entity Title: Not reported  
 Affiliation Address: 2365 Iron Point Road, Suite 120  
 Affiliation City: Folsom  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95630  
 Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
 Entity Name: Cemex Construction Materials Pacific, LLC  
 Entity Title: Not reported  
 Affiliation Address: 2365 Iron Point Road, Suite 120  
 Affiliation City: Folsom  
 Affiliation State: CA  
 Affiliation Country: United States  
 Affiliation Zip: 95630  
 Affiliation Phone: (916) 941-2800

Affiliation Type Desc: Operator  
 Entity Name: Cemex Construction Materials Pacific, LLC  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: (925) 672-4900

**8**  
**NW**  
**1/4-1/2**  
**0.461 mi.**  
**2433 ft.**

**KAISER SAND & GRAVEL**  
**2484 PINE HOLLOW RD**  
**CLAYTON, CA 94517**

**LUST 1000727398**  
**HIST CORTESE N/A**  
**CERS**

**Relative:**  
**Lower**  
**Actual:**  
**434 ft.**

**LUST:**  
 Name: KAISER SAND & GRAVEL  
 Address: 2484 PINE HOLLOW RD  
 City,State,Zip: CLAYTON, CA 94517  
 Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0601300548](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0601300548)  
 Global Id: T0601300548  
 Latitude: 37.9411  
 Longitude: -121.94935  
 Status: Completed - Case Closed

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER SAND & GRAVEL (Continued)**

**1000727398**

Status Date: 03/26/1997  
Case Worker: KEB  
RB Case Number: 07-0595  
Local Agency: CONTRA COSTA COUNTY  
File Location: Not reported  
Local Case Number: 02247  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

LUST:

Global Id: T0601300548  
Contact Type: Regional Board Caseworker  
Contact Name: KEVIN BROWN  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: kebrown@waterboards.ca.gov  
Phone Number: Not reported

Global Id: T0601300548  
Contact Type: Local Agency Caseworker  
Contact Name: SUE LOYD  
Organization Name: CONTRA COSTA COUNTY  
Address: 4333 PACHECO BLVD.  
City: MARTINEZ  
Email: sloyd@hsd.co.contra-costa.ca.us  
Phone Number: Not reported

LUST:

Global Id: T0601300548  
Action Type: Other  
Date: 11/19/1985  
Action: Leak Stopped

Global Id: T0601300548  
Action Type: Other  
Date: 11/19/1985  
Action: Leak Reported

Global Id: T0601300548  
Action Type: ENFORCEMENT  
Date: 03/26/1997  
Action: Closure/No Further Action Letter

Global Id: T0601300548  
Action Type: Other  
Date: 11/19/1985  
Action: Leak Discovery

LUST:

Global Id: T0601300548  
Status: Open - Case Begin Date  
Status Date: 11/19/1985

Global Id: T0601300548  
Status: Open - Site Assessment

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER SAND & GRAVEL (Continued)**

**1000727398**

Status Date: 08/01/1994  
Global Id: T0601300548  
Status: Completed - Case Closed  
Status Date: 03/26/1997

**LUST REG 2:**

Region: 2  
Facility Id: 07-0595  
Facility Status: Case Closed  
Case Number: 02247  
How Discovered: Tank Closure  
Leak Cause: UNK  
Leak Source: UNK  
Date Leak Confirmed: 8/1/1994  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: Not reported  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**HIST CORTESE:**

edr\_fname: KAISER SAND & GRAVEL  
edr\_fadd1: 2484 PINE HOLLOW  
City,State,Zip: CLAYTON, CA 94517  
Region: CORTESE  
Facility County Code: 7  
Reg By: LTNKA  
Reg Id: 07-0595

**CERS:**

Name: KAISER SAND & GRAVEL  
Address: 2484 PINE HOLLOW RD  
City,State,Zip: CLAYTON, CA 94517  
Site ID: 257971  
CERS ID: T0601300548  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: SUE LOYD - CONTRA COSTA COUNTY  
Entity Title: Not reported  
Affiliation Address: 4333 PACHECO BLVD.  
Affiliation City: MARTINEZ  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported  
  
Affiliation Type Desc: Regional Board Caseworker  
Entity Name: KEVIN BROWN - SAN FRANCISCO BAY RWQCB (REGION 2)  
Entity Title: Not reported  
Affiliation Address: 1515 CLAY STREET, SUITE 1400



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER SAND & GRAVEL (Continued)**

**1000727398**

Affiliation City: OAKLAND  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: 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: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: N/A
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 01/03/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/13/2020
	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: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: N/A
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 01/03/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/13/2020
	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: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: EPA  
Telephone: N/A  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/13/2020  
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: 04/05/2019  
Next Scheduled EDR Contact: 04/13/2020  
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: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/21/2019  
Number of Days to Update: 14

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/27/2020  
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: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: 800-424-9346
Date Made Active in Reports: 11/21/2019	Last EDR Contact: 01/03/2020
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/27/2020
	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: 12/16/2019	Source: EPA
Date Data Arrived at EDR: 12/16/2019	Telephone: 800-424-9346
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	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: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	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: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	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: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	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: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	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: 11/04/2019	Source: Department of the Navy
Date Data Arrived at EDR: 11/13/2019	Telephone: 843-820-7326
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/07/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 02/24/2020
	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: 11/22/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/22/2019	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/22/2019
Number of Days to Update: 67	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

#### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/22/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/22/2019	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/22/2019
Number of Days to Update: 67	Next Scheduled EDR Contact: 03/09/2020
	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: 09/09/2019

Date Data Arrived at EDR: 09/09/2019

Date Made Active in Reports: 09/23/2019

Number of Days to Update: 14

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 12/19/2019

Next Scheduled EDR Contact: 04/06/2020

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: 10/28/2019

Date Data Arrived at EDR: 10/29/2019

Date Made Active in Reports: 01/07/2020

Number of Days to Update: 70

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020

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: 10/28/2019

Date Data Arrived at EDR: 10/29/2019

Date Made Active in Reports: 01/07/2020

Number of Days to Update: 70

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020

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: 11/11/2019

Date Data Arrived at EDR: 11/12/2019

Date Made Active in Reports: 01/08/2020

Number of Days to Update: 57

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 11/12/2019

Next Scheduled EDR Contact: 02/24/2020

Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	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	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

## LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: see region list
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/23/2020
	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	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	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 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	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	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 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 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 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	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	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 R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/12/2019	Source: EPA Region 4
Date Data Arrived at EDR: 07/29/2019	Telephone: 404-562-8677
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/16/2019	Source: EPA Region 10
Date Data Arrived at EDR: 07/29/2019	Telephone: 206-553-2857
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/02/2019	Source: EPA Region 8
Date Data Arrived at EDR: 10/22/2019	Telephone: 303-312-6271
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 05/04/2020
	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: 04/08/2019	Source: EPA, Region 5
Date Data Arrived at EDR: 07/30/2019	Telephone: 312-886-7439
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/11/2019	Source: EPA Region 1
Date Data Arrived at EDR: 07/29/2019	Telephone: 617-918-1313
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 07/02/2019	Source: EPA Region 7
Date Data Arrived at EDR: 10/16/2019	Telephone: 913-551-7003
Date Made Active in Reports: 10/24/2019	Last EDR Contact: 12/16/2020
Number of Days to Update: 8	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/01/2019	Source: EPA Region 6
Date Data Arrived at EDR: 07/29/2019	Telephone: 214-665-6597
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	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: 04/08/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/29/2019	Telephone: 415-972-3372
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	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	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	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	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	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	Source: Region Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 11/18/2004	Telephone: 213-576-6600
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 07/01/2011
Number of Days to Update: 47	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	Source: Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 04/05/2005	Telephone: 916-464-3291
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: No Update Planned

## **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: 08/27/2019  
Date Data Arrived at EDR: 08/28/2019  
Date Made Active in Reports: 11/11/2019  
Number of Days to Update: 75

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 04/20/2020  
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: 09/09/2019	Source: SWRCB
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-341-5851
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/23/2020
	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: 09/06/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-327-7844
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 03/23/2020
	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: 12/11/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/30/2020
	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: 04/16/2019	Source: EPA Region 10
Date Data Arrived at EDR: 07/30/2019	Telephone: 206-553-2857
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/01/2019	Source: EPA Region 6
Date Data Arrived at EDR: 07/29/2019	Telephone: 214-665-7591
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/08/2019	Source: EPA Region 5
Date Data Arrived at EDR: 07/29/2019	Telephone: 312-886-6136
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	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: 04/12/2019	Source: EPA Region 4
Date Data Arrived at EDR: 07/29/2019	Telephone: 404-562-9424
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/02/2019	Source: EPA Region 8
Date Data Arrived at EDR: 10/22/2019	Telephone: 303-312-6137
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 05/04/2020
	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: 04/08/2019	Source: EPA Region 9
Date Data Arrived at EDR: 07/29/2019	Telephone: 415-972-3368
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/11/2019	Source: EPA, Region 1
Date Data Arrived at EDR: 07/30/2019	Telephone: 617-918-1313
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2019	Source: EPA Region 7
Date Data Arrived at EDR: 07/29/2019	Telephone: 913-551-7003
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal voluntary cleanup sites***

### **INDIAN VCP R1: Voluntary Cleanup Priority Listing**

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

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 12/17/2019
Number of Days to Update: 142	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Varies

### **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	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

### **VCP: Voluntary Cleanup Program Properties**

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/28/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/29/2019	Telephone: 916-323-3400
Date Made Active in Reports: 01/07/2020	Last EDR Contact: 01/28/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

## ***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: 09/23/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/24/2019	Telephone: 916-323-7905
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 12/19/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

#### **US BROWNFIELDS: A Listing of Brownfields Sites**

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/04/2019	Telephone: 202-566-2777
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/30/2020
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### **WMUDS/SWAT: Waste Management Unit Database**

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

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 01/24/2020
Number of Days to Update: 30	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: No Update Planned

### **SWRCY: Recycler Database**

A listing of recycling facilities in California.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-323-3836
Date Made Active in Reports: 11/07/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

### **HAULERS: Registered Waste Tire Haulers Listing**

A listing of registered waste tire haulers.

Date of Government Version: 11/15/2019	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 11/15/2019	Telephone: 916-341-6422
Date Made Active in Reports: 01/23/2020	Last EDR Contact: 11/07/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 02/24/2020
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 01/27/2020
Number of Days to Update: 52	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Varies

### **ODI: Open Dump Inventory**

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### **DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations**

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

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 01/17/2020
Number of Days to Update: 137	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 01/31/2020
Number of Days to Update: 176	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Varies

## Local Lists of Hazardous waste / Contaminated Sites

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/13/2019	Telephone: 202-307-1000
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 11/20/2019
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/09/2020
	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: 10/28/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/29/2019	Telephone: 916-323-3400
Date Made Active in Reports: 01/07/2020	Last EDR Contact: 01/28/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 05/11/2020
	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: 06/30/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/16/2019	Telephone: 916-255-6504
Date Made Active in Reports: 09/24/2019	Last EDR Contact: 01/06/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Varies

### 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: 10/21/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: CalEPA  
Telephone: 916-323-2514  
Last EDR Contact: 01/22/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Quarterly

## TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019  
Date Data Arrived at EDR: 06/13/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
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: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 57

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 08/20/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	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: 08/01/2019	Source: San Francisco County Department of Public Health
Date Data Arrived at EDR: 08/02/2019	Telephone: 415-252-3896
Date Made Active in Reports: 10/11/2019	Last EDR Contact: 01/31/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 05/18/2020
	Data Release Frequency: Varies

## CA FID UST: Facility Inventory Database

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

Date of Government Version: 10/31/1994	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: 10/21/2019	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/22/2019	Telephone: 916-323-2514
Date Made Active in Reports: 01/03/2020	Last EDR Contact: 01/22/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/04/2020
	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: 08/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2019	Telephone: 916-323-3400
Date Made Active in Reports: 10/29/2019	Last EDR Contact: 12/02/2019
Number of Days to Update: 60	Next Scheduled EDR Contact: 03/16/2020
	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: 10/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/07/2019	Telephone: 202-564-6023
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 01/03/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/13/2020
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 09/03/2019	Source: DTSC and SWRCB
Date Data Arrived at EDR: 09/04/2019	Telephone: 916-323-3400
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 06/24/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 12/06/2019
Number of Days to Update: 89	Next Scheduled EDR Contact: 04/06/2020
	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: 05/15/2019	Source: Office of Emergency Services
Date Data Arrived at EDR: 06/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 01/22/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 05/04/2020
	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: 09/09/2019	Source: State Water Quality Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	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: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	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: 11/12/2019	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 11/19/2019	Telephone: 202-528-4285
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/19/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/02/2020
	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	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 01/10/2020
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/20/2020
	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	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 01/09/2020
Number of Days to Update: 574	Next Scheduled EDR Contact: 04/20/2020
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 12/02/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/24/2020
	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: 09/23/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/24/2019	Telephone: 202-566-1917
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/19/2019
Number of Days to Update: 87	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	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: 10/31/2019
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/17/2020
	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: 11/08/2019
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/17/2020
	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: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 12/20/2019
Number of Days to Update: 198	Next Scheduled EDR Contact: 03/30/2020
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 11/16/2018  
Date Made Active in Reports: 11/21/2019  
Number of Days to Update: 370

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 11/22/2019  
Next Scheduled EDR Contact: 03/02/2020  
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: 05/01/2019  
Date Data Arrived at EDR: 10/23/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 84

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 01/24/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Annually

## ROD: Records Of Decision

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

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019  
Date Data Arrived at EDR: 05/02/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 21

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: 202-564-6023
Date Made Active in Reports: 11/21/2019	Last EDR Contact: 01/03/2020
Number of Days to Update: 14	Next Scheduled EDR Contact: 02/17/2020
	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: 01/10/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	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: 01/06/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 04/20/2020
	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: 10/25/2019	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 10/25/2019	Telephone: 301-415-7169
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 01/21/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018	Source: Department of Energy
Date Data Arrived at EDR: 12/04/2019	Telephone: 202-586-8719
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 12/04/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 03/16/2020
	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: 11/25/2019
Number of Days to Update: 251	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 11/06/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 02/17/2020
	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: 12/20/2019
Number of Days to Update: 84	Next Scheduled EDR Contact: 04/13/2020
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 10/01/2019  
Date Data Arrived at EDR: 10/29/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 78

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 01/28/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Quarterly

## CONSENT: Superfund (CERCLA) Consent Decrees

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

Date of Government Version: 09/30/2019  
Date Data Arrived at EDR: 10/09/2019  
Date Made Active in Reports: 12/20/2019  
Number of Days to Update: 72

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
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: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 12/16/2019  
Next Scheduled EDR Contact: 04/06/2020  
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: 01/07/2020  
Next Scheduled EDR Contact: 04/20/2020  
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: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 11/15/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/13/2020  
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

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

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

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

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

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

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

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/06/2019  
Date Data Arrived at EDR: 11/25/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 64

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Semi-Annually

## MINES VIOLATIONS: MSHA Violation Assessment Data

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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/03/2019  
Date Data Arrived at EDR: 12/03/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi  
Telephone: 202-693-9424  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/22/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/22/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2019  
Date Data Arrived at EDR: 09/10/2019  
Date Made Active in Reports: 10/17/2019  
Number of Days to Update: 37

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 08/12/2019  
Date Data Arrived at EDR: 09/04/2019  
Date Made Active in Reports: 12/03/2019  
Number of Days to Update: 90

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 01/17/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 74

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 01/13/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

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

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 11/20/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 03/09/2020
	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: 10/06/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/08/2019	Telephone: 202-564-2280
Date Made Active in Reports: 01/02/2020	Last EDR Contact: 01/07/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Quarterly

## 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: 11/18/2019	Source: EPA
Date Data Arrived at EDR: 11/19/2019	Telephone: 800-385-6164
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/19/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/02/2020
	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	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	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: 09/23/2019	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 09/24/2019	Telephone: 916-323-3400
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 12/20/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 04/06/2020
	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	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/14/2019	Telephone: 925-454-2361
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 11/14/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Varies

## CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/31/2019  
Date Data Arrived at EDR: 11/01/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 40

Source: San Francisco County Department of Environmental Health  
Telephone: 415-252-3896  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
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: 09/27/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 37

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

## DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/28/2019  
Date Data Arrived at EDR: 08/30/2019  
Date Made Active in Reports: 10/29/2019  
Number of Days to Update: 60

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

## DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 10/11/2019  
Date Made Active in Reports: 12/12/2019  
Number of Days to Update: 62

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Annually

## EMI: Emissions Inventory Data

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

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/24/2019  
Date Made Active in Reports: 08/22/2019  
Number of Days to Update: 59

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 03/29/2020  
Data Release Frequency: Varies

## ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/19/2019  
Date Data Arrived at EDR: 07/22/2019  
Date Made Active in Reports: 09/26/2019  
Number of Days to Update: 66

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 01/22/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 11/08/2019	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 11/12/2019	Telephone: 916-341-6066
Date Made Active in Reports: 01/08/2020	Last EDR Contact: 11/07/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Varies

## HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 05/29/2019	Telephone: 916-255-1136
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 54	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Annually

## ICE: ICE

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

Date of Government Version: 11/18/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/19/2019	Telephone: 877-786-9427
Date Made Active in Reports: 01/23/2020	Last EDR Contact: 11/19/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/02/2020
	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	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	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: 11/18/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/19/2019	Telephone: 916-323-3400
Date Made Active in Reports: 01/23/2020	Last EDR Contact: 11/19/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/02/2020
	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: 10/07/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/08/2019	Telephone: 916-440-7145
Date Made Active in Reports: 11/07/2019	Last EDR Contact: 01/07/2020
Number of Days to Update: 30	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-322-1080
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

## MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 07/19/2019	Source: Department of Public Health
Date Data Arrived at EDR: 09/04/2019	Telephone: 916-558-1784
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/11/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/12/2019	Telephone: 916-445-9379
Date Made Active in Reports: 01/08/2020	Last EDR Contact: 11/12/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 02/24/2020
	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: 09/03/2019	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 09/04/2019	Telephone: 916-445-4038
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-323-3836
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/16/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/18/2019	Telephone: 916-445-3846
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 12/11/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/30/2020
	Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 08/20/2019	Source: Department of Conservation
Date Data Arrived at EDR: 08/20/2019	Telephone: 916-445-2408
Date Made Active in Reports: 11/18/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 90	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/09/2019	Source: State Water Resource Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/11/2018	Telephone: 559-445-5577
Date Made Active in Reports: 09/13/2018	Last EDR Contact: 01/07/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 04/20/2020
	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: 11/14/2019
Number of Days to Update: 9	Next Scheduled EDR Contact: 03/02/2020
	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: 12/17/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: No Update Planned

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## PROJECT: Project Sites (GEOTRACKER)

Projects sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 58

Source: State Water Resources Control Board  
Telephone: 916-341-5810  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Quarterly

## CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 09/03/2019  
Date Data Arrived at EDR: 09/04/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 62

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
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: 10/21/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/03/2020  
Number of Days to Update: 73

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 01/22/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

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

Non-Case Information sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

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

Other Oil & Gas Projects sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/09/2019

Date Data Arrived at EDR: 09/09/2019

Date Made Active in Reports: 11/01/2019

Number of Days to Update: 53

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 12/10/2019

Next Scheduled EDR Contact: 03/23/2020

Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/09/2019

Date Data Arrived at EDR: 09/09/2019

Date Made Active in Reports: 11/01/2019

Number of Days to Update: 53

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 12/10/2019

Next Scheduled EDR Contact: 03/23/2020

Data Release Frequency: Varies

## WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/09/2019

Date Data Arrived at EDR: 09/09/2019

Date Made Active in Reports: 11/01/2019

Number of Days to Update: 53

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 12/10/2019

Next Scheduled EDR Contact: 03/23/2020

Data Release Frequency: Varies

## MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018

Date Data Arrived at EDR: 10/21/2019

Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533

Last EDR Contact: 11/22/2019

Next Scheduled EDR Contact: 03/09/2020

Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019  
Date Data Arrived at EDR: 01/11/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 53

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/02/2019  
Date Data Arrived at EDR: 10/03/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 34

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/24/2047  
Data Release Frequency: Semi-Annually

## AMADOR COUNTY:

### CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 09/10/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 51

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

## BUTTE COUNTY:

### CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 08/05/2019  
Date Data Arrived at EDR: 08/07/2019  
Date Made Active in Reports: 10/09/2019  
Number of Days to Update: 63

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 12/03/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SL CONTRA COSTA: Site List

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

Date of Government Version: 08/20/2019  
Date Data Arrived at EDR: 08/23/2019  
Date Made Active in Reports: 10/22/2019  
Number of Days to Update: 60

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 01/27/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

### CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 10/11/2019  
Date Data Arrived at EDR: 10/29/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 43

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 01/24/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 09/12/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 49

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 05/11/2020  
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: 10/08/2019  
Date Data Arrived at EDR: 10/10/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 62

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/13/2020  
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: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: No Update Planned

## HUMBOLDT COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 11/13/2019  
Date Data Arrived at EDR: 11/14/2019  
Date Made Active in Reports: 01/23/2020  
Number of Days to Update: 70

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 10/30/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

### CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/03/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 72

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 06/04/2018  
Data Release Frequency: Varies

## KERN COUNTY:

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 10/28/2019  
Date Data Arrived at EDR: 11/05/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 64

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
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: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## LAKE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 08/16/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 01/08/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/22/2019  
Date Data Arrived at EDR: 07/23/2019  
Date Made Active in Reports: 09/26/2019  
Number of Days to Update: 65

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
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: 12/11/2019  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: No Update Planned

### HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2019  
Date Data Arrived at EDR: 10/04/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 34

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Semi-Annually

### LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/15/2019  
Date Data Arrived at EDR: 10/16/2019  
Date Made Active in Reports: 12/12/2019  
Number of Days to Update: 57

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 01/14/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

### LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019  
Date Data Arrived at EDR: 01/15/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 51

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 01/13/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	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: 12/20/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Varies

## LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 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: 01/17/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 04/27/2020
	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: 12/20/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/06/2020
	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: 12/20/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/06/2020
	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: 10/01/2019	Source: Community Health Services
Date Data Arrived at EDR: 10/29/2019	Telephone: 323-890-7806
Date Made Active in Reports: 01/08/2020	Last EDR Contact: 01/14/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 04/27/2020
	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: 01/13/2020
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/27/2020
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 01/17/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank  
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/30/2019	Telephone: 310-618-2973
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 01/17/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/04/2020
	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: 11/18/2019	Source: Madera County Environmental Health
Date Data Arrived at EDR: 11/20/2019	Telephone: 559-675-7823
Date Made Active in Reports: 01/27/2020	Last EDR Contact: 11/14/2019
Number of Days to Update: 68	Next Scheduled EDR Contact: 03/02/2020
	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: 12/19/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/13/2020
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

Date of Government Version: 11/18/2019	Source: Merced County Environmental Health
Date Data Arrived at EDR: 11/20/2019	Telephone: 209-381-1094
Date Made Active in Reports: 01/03/2020	Last EDR Contact: 11/14/2019
Number of Days to Update: 44	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Varies

MONO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 08/21/2019  
Date Data Arrived at EDR: 09/03/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 58

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

## MONTEREY COUNTY:

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

Date of Government Version: 11/06/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 50

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Varies

## NAPA COUNTY:

### LUST NAPA: Sites With Reported Contamination A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 03/02/2017  
Number of Days to Update: 50

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

### UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 10/30/2019  
Date Data Arrived at EDR: 10/30/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 42

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 01/24/2020  
Next Scheduled EDR Contact: 05/11/2020  
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: 07/10/2019  
Date Data Arrived at EDR: 08/07/2019  
Date Made Active in Reports: 10/09/2019  
Number of Days to Update: 63

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: Annually

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

Date of Government Version: 07/10/2019  
Date Data Arrived at EDR: 08/09/2019  
Date Made Active in Reports: 10/09/2019  
Number of Days to Update: 61

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: Quarterly

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

Date of Government Version: 10/04/2019  
Date Data Arrived at EDR: 11/05/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 64

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/05/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 09/03/2019  
Date Data Arrived at EDR: 09/05/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 61

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
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: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
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: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 52

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/16/2019  
Next Scheduled EDR Contact: 03/30/2020  
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: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/03/2020  
Number of Days to Update: 73

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/16/2019  
Next Scheduled EDR Contact: 03/30/2020  
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: 08/06/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 37

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/23/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Quarterly

### ML SACRAMENTO: Master Hazardous Materials Facility List

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

Date of Government Version: 08/07/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/08/2019  
Number of Days to Update: 38

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/23/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 11/14/2019  
Date Data Arrived at EDR: 11/15/2019  
Date Made Active in Reports: 01/23/2020  
Number of Days to Update: 69

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## SAN BERNARDINO COUNTY:

### PERMITS SAN BERNARDINO: Hazardous Material Permits

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

Date of Government Version: 08/29/2019  
Date Data Arrived at EDR: 08/30/2019  
Date Made Active in Reports: 10/29/2019  
Number of Days to Update: 60

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 09/03/2019  
Date Data Arrived at EDR: 09/04/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 62

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 56

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
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: 10/16/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 52

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: No Update Planned

### UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2019  
Date Data Arrived at EDR: 08/02/2019  
Date Made Active in Reports: 10/08/2019  
Number of Days to Update: 67

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 01/07/2020  
Next Scheduled EDR Contact: 05/18/2020  
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: 12/11/2019  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 12/11/2019  
Next Scheduled EDR Contact: 03/02/2020  
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: 09/03/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 12/05/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: No Update Planned

## SANTA CLARA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SANTA CLARA: Cupa Facility List Cupa facility list

Date of Government Version: 11/18/2019  
Date Data Arrived at EDR: 11/19/2019  
Date Made Active in Reports: 01/23/2020  
Number of Days to Update: 65

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

## LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

## SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 10/30/2019  
Date Data Arrived at EDR: 11/01/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 68

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
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: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## SOLANO COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/06/2019  
Date Made Active in Reports: 08/13/2019  
Number of Days to Update: 68

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/28/2019  
Date Data Arrived at EDR: 08/30/2019  
Date Made Active in Reports: 10/29/2019  
Number of Days to Update: 60

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### CUPA SONOMA: Cupa Facility List

Cupa Facility list

Date of Government Version: 06/18/2019  
Date Data Arrived at EDR: 06/25/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 04/06/2020  
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: 10/01/2019  
Date Data Arrived at EDR: 10/02/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 36

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 12/17/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 11/04/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 62

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 01/13/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

## SUTTER COUNTY:

### UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 08/29/2019  
Date Data Arrived at EDR: 09/03/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 64

Source: Sutter County Environmental Health Services  
Telephone: 530-822-7500  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 01/23/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List Cupa facility list

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 08/12/2019  
Date Data Arrived at EDR: 08/14/2019  
Date Made Active in Reports: 10/17/2019  
Number of Days to Update: 64

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 61

Source: Divison of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## VENTURA COUNTY:

### BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/29/2019  
Date Data Arrived at EDR: 07/29/2019  
Date Made Active in Reports: 09/30/2019  
Number of Days to Update: 63

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Quarterly

### LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/01/2011  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites  
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 11/07/2019  
Next Scheduled EDR Contact: 02/24/2020  
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: 09/26/2019  
Date Data Arrived at EDR: 10/23/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 51

Source: Ventura County Resource Management Agency  
Telephone: 805-654-2813  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 05/04/2020  
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: 07/26/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 09/25/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 30

Source: Yolo County Department of Health  
Telephone: 530-666-8646  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 11/04/2019  
Date Data Arrived at EDR: 11/06/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 63

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523  
Last EDR Contact: 01/27/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 05/14/2019	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 05/14/2019	Telephone: 860-424-3375
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 01/30/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 01/06/2020
Number of Days to Update: 36	Next Scheduled EDR Contact: 04/20/2020
	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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 05/01/2019	Telephone: 518-402-8651
Date Made Active in Reports: 06/21/2019	Last EDR Contact: 01/31/2020
Number of Days to Update: 51	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/19/2019	Telephone: 717-783-8990
Date Made Active in Reports: 09/10/2019	Last EDR Contact: 01/14/2020
Number of Days to Update: 53	Next Scheduled EDR Contact: 04/07/2020
	Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018	Source: Department of Environmental Management
Date Data Arrived at EDR: 10/02/2019	Telephone: 401-222-2797
Date Made Active in Reports: 12/10/2019	Last EDR Contact: 11/14/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018	Source: Department of Natural Resources
Date Data Arrived at EDR: 06/19/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 12/18/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

### Electric Power Transmission Line Data

Source: Endeavor Business Media

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

## STREET AND ADDRESS INFORMATION

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

CLAYTON TRUST PROPERTY  
MITCHELL CANYON ROAD  
CLAYTON, CA 94517

### **TARGET PROPERTY COORDINATES**

Latitude (North):	37.935244 - 37° 56' 6.88"
Longitude (West):	121.94392 - 121° 56' 38.11"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	592806.1
UTM Y (Meters):	4198950.5
Elevation:	493 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	5640430 CLAYTON, 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).

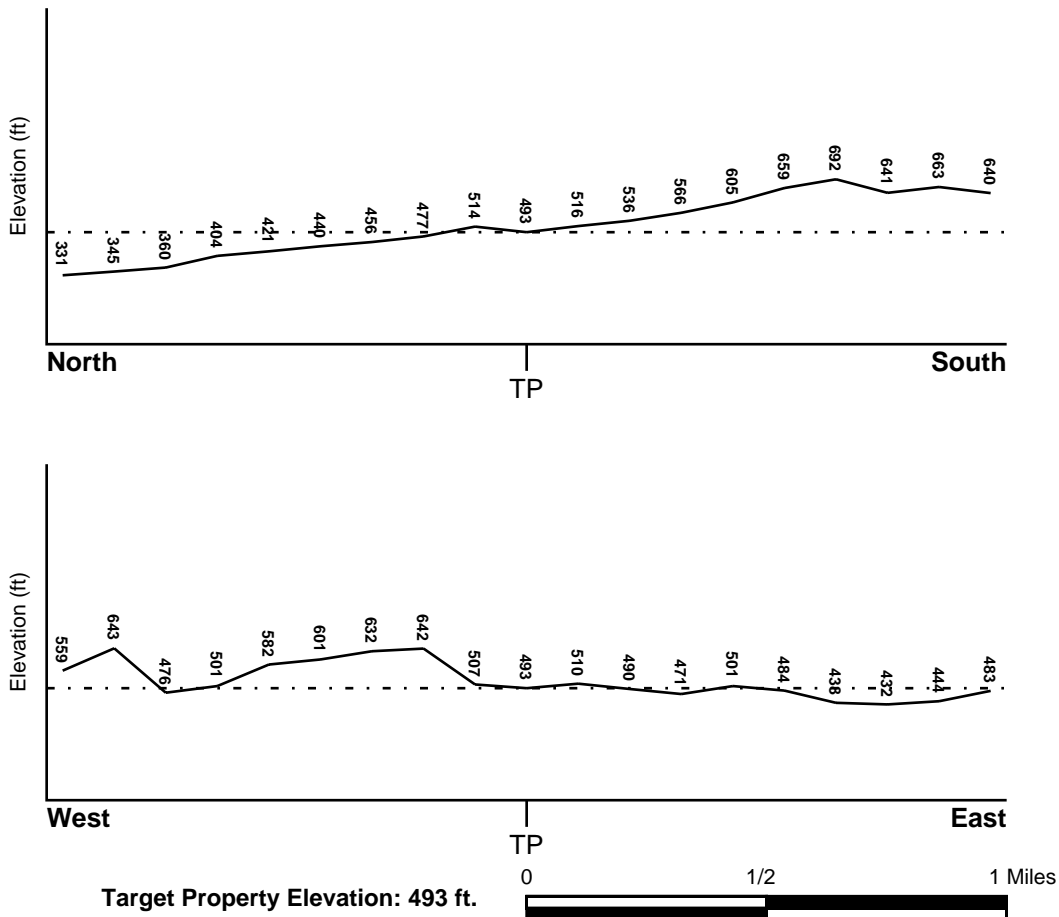
## TOPOGRAPHIC INFORMATION

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 ENE

## 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>
06013C0312F	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06013C0304F	FEMA FIRM Flood data
06013C0308F	FEMA FIRM Flood data
06013C0316F	FEMA FIRM Flood data

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
CLAYTON	YES - refer to the Overview Map and Detail Map

## **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

Search Radius:	1.25 miles
Status:	Not found

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

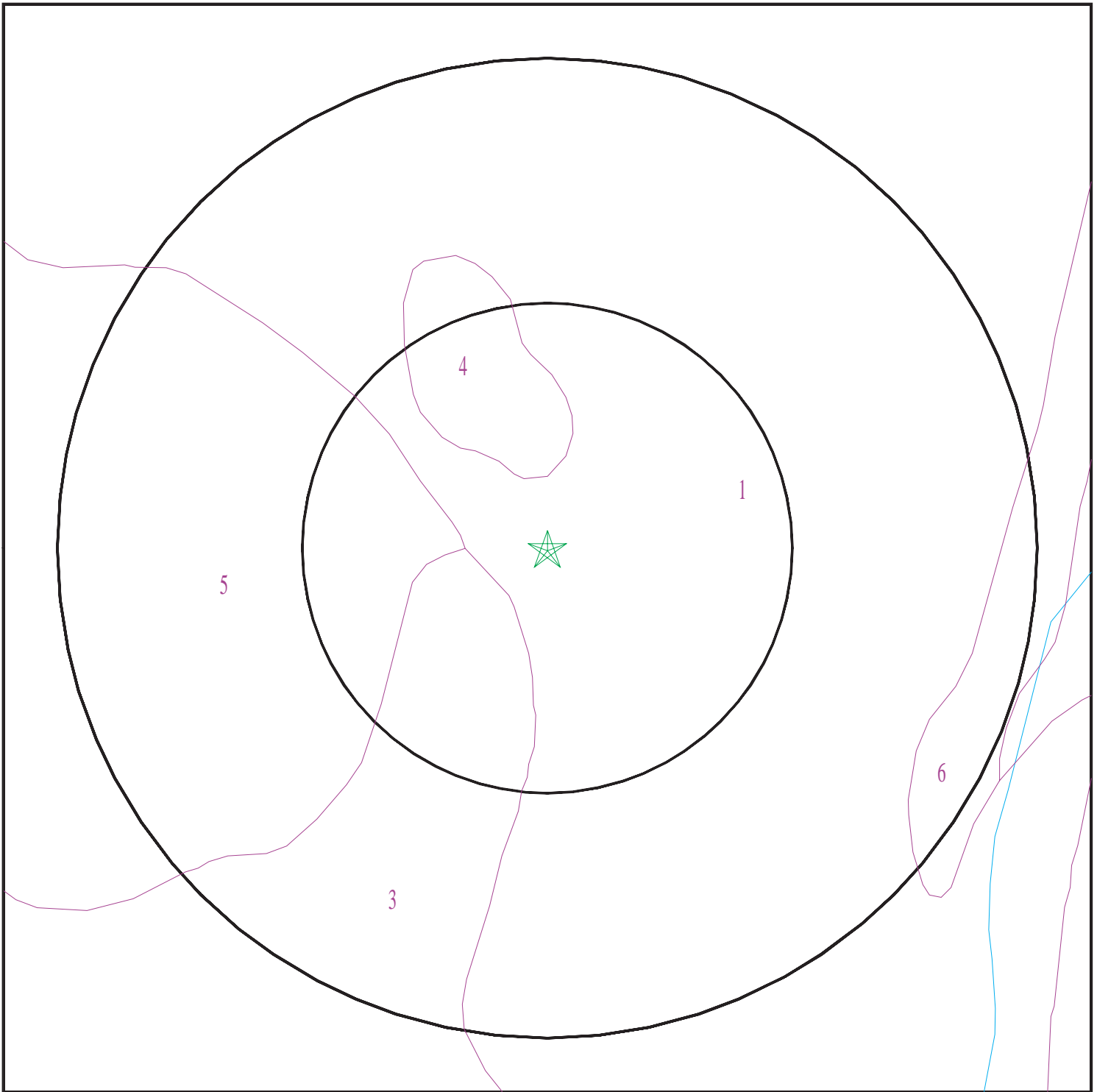
Era:	Mesozoic
System:	Cretaceous
Series:	Upper Cretaceous
Code:	uK <i>(decoded above as Era, System &amp; Series)</i>

#### **GEOLOGIC AGE IDENTIFICATION**

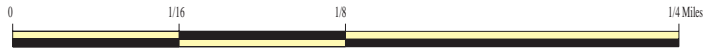
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 5957509.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Clayton Trust Property  
ADDRESS: Mitchell Canyon Road  
Clayton CA 94517  
LAT/LONG: 37.935244 / 121.94392

CLIENT: AdvancedGeo, Inc.  
CONTACT: Diane Becker  
INQUIRY #: 5957509.2s  
DATE: February 03, 2020 1:30 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: PERKINS

Soil Surface Texture: gravelly 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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
2	18 inches	59 inches	gravelly 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	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1

### Soil Map ID: 2

Soil Component Name: ZAMORA

Soil Surface Texture: silty clay 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	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.1
2	16 inches	72 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.1

### Soil Map ID: 3

Soil Component Name: GILROY

Soil Surface Texture: clay loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 102 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
2	14 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
3	29 inches	40 inches	very gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
4	40 inches	44 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:

### Soil Map ID: 4

Soil Component Name: LOS OSOS

Soil Surface Texture: clay loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
2	9 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
3	31 inches	35 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:

---

### Soil Map ID: 5

Soil Component Name: GILROY

Soil Surface Texture: clay loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 102 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:
2	14 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:
3	29 inches	40 inches	very gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:
4	40 inches	44 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0 Min: 0	Max: Min:

### Soil Map ID: 6

Soil Component Name: Perkins

Soil Surface Texture: gravelly 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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
2	18 inches	59 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<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>
No Wells Found		

## **FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CA0706053	1/2 - 1 Mile NE

Note: PWS System location is not always the same as well location.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## STATE DATABASE WELL INFORMATION

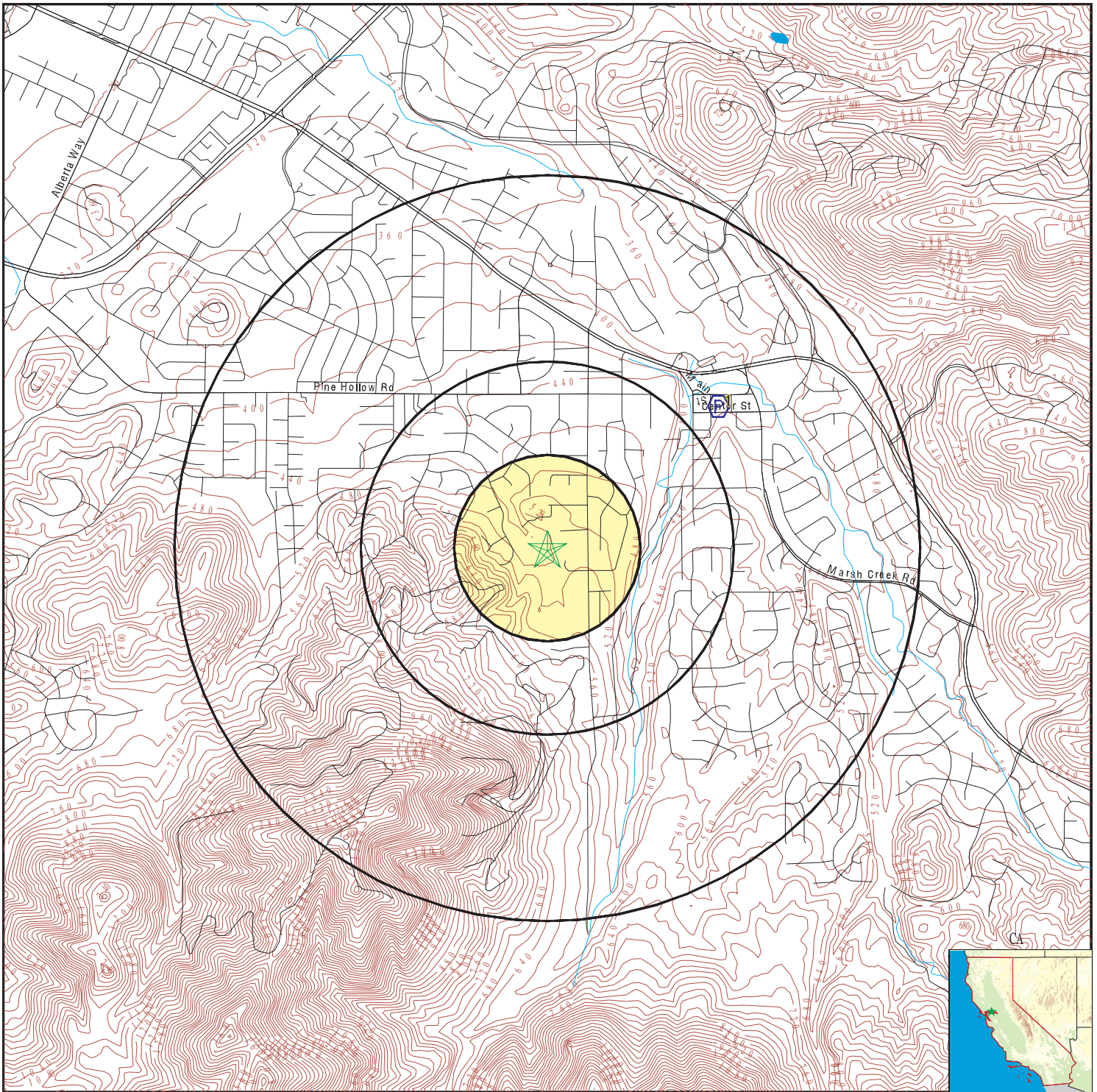
MAP ID









WELL ID






LOCATION  
FROM TP

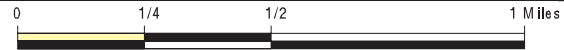
No Wells Found

# PHYSICAL SETTING SOURCE MAP - 5957509.2s



-  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: Clayton Trust Property  
 ADDRESS: Mitchell Canyon Road  
 Clayton CA 94517  
 LAT/LONG: 37.935244 / 121.94392

CLIENT: AdvancedGeo, Inc.  
 CONTACT: Diane Becker  
 INQUIRY #: 5957509.2s  
 DATE: February 03, 2020 1:29 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**1**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FRDS PWS      CA0706053**

PWS ID:	CA0706053	PWS type:	System Owner/Responsible Party
PWS name:	VERNON PETERSON	PWS address:	Not Reported
PWS city:	CLAYTON	PWS state:	CA
PWS zip:	94517	PWS ID:	CA0706053
Activity status:	Active	Date system activated:	7706
Date system deactivated:	Not Reported	Retail population:	00000025
System name:	BROKEN WHEEL	System address:	VERNON PETERSON
System address:	HWY 4 & HILL AVE	System city:	OAKLEY
System state:	CA	System zip:	94561
Population served:	Under 101 Persons	Treatment:	Untreated
Latitude:	375627	Longitude:	1215604

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94517	6	0

Federal EPA Radon Zone for CONTRA COSTA 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 Zip Code: 94517

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.500 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> 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.

### STATE RECORDS

#### 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.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

#### California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### RADON

#### State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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**Appendix D -  
Interview Documentation**

**No documents have been associated  
with this appendix.**

**Appendix E -  
Miscellaneous Documents**

## VAPOR ENCROACHMENT SCREENING (ASTM E2600-15)

### CLAYTON TRUST PROPERTY

APNs 121-090-011-2 and 121-090-016-1

Clayton, California

February 2020

In accordance with ASTM Standard E2600-15 and the Buonicore Area of Concern determination (2011)<sup>i</sup>, Advanced GeoEnvironmental, Inc. performed the initial Tier 1 Vapor Encroachment Screening which includes determining the presence or likely presence of volatile organic compounds (VOCs) vapors in the sub-surface of the subject property (SP) caused by the release of vapors from contaminated soil or groundwater either on or near the Target Property within an Area of Concern (AOC) to determine if a potential Vapor Encroachment Condition (VEC) exists. Should sites fall within the AOC, a limited Tier 2 screening will be performed.

### TIER 1 SCREENING

#### (1) Ground Water Flow Direction: Is the groundwater flow direction known?

No	Proceed to <b>(1a)</b>
<input checked="" type="checkbox"/> Yes	Proceed to <b>(1b)</b> Identify the groundwater flow direction here: <b>Northeast</b>

**(1a)** If groundwater flow direction is **unknown**, the AOC is:

- Non-Petroleum Hydrocarbon Contaminants of Concern (COC): 1,760 feet (1/3-mile) from the contaminated site boundary to the boundary of the SP.
- Dissolved Petroleum Hydrocarbon COC: 528 feet (1/10-mile) for from the contaminated site boundary to the boundary of the SP.
- Free Product (Light non-aqueous phase liquids [LNAPL]) COC: 528 feet (1/10-mile) for from the contaminated site boundary to the boundary of the SP.

Are sites located within the AOC? **Not Applicable**

**(1b)** If groundwater flow direction is known, the AOC for non-petroleum hydrocarbon COC and dissolved petroleum hydrocarbon or free product (LNAPL) COC is:

- Non-Petroleum Hydrocarbon COC: 1,760 feet (1/3-mile) in the up-gradient position, **365 feet** in the equi-gradient position, and **100 feet** in the down-gradient position.
- Dissolved Petroleum Hydrocarbon COC: 528 feet (1/10-mile) in the up-gradient position; **95 feet** in the equi-gradient position, and **30 feet** in the down-gradient position.



- Free Product (LNAPL) COC: **528 feet (1/10-mile)** in the up-gradient position, **165 feet** in the equi-gradient position, and **100 feet** in the down-gradient position.

Are sites located within the AOC?

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> No | Tier 1 screening is complete, and no VEC currently exists, proceed to <b><u>CONCLUSIONS</u></b>   |
| <input type="checkbox"/> Yes           | Proceed to <b>(2)</b><br><b>Site Name 1, address:</b> Summary, including known or possible COC<br><b>Site Name 2, address:</b> Summary, including known or possible COC |

## **(2) Subsurface Characteristics**

- (2a)** Is there a hydraulic (e.g., a river) or physical barrier (e.g., clay barrier) between the SP and the suspected contaminated site (or sites)? **Not Applicable**
- (2b)** Are **non-petroleum hydrocarbon COC** and **dissolved petroleum hydrocarbon** or **free product (LNAPL) COC** known to be in the groundwater beneath the subject property. **Not Applicable**

## **TIER 2 SCREENING**

If the Tier 1 screening indicates that a VEC exists, the Tier 2 non-invasive screening can be used to refine screening. Tier 2 applies numeric screening criteria to existing or newly collected soil, soil gas and/or groundwater monitoring results to provide greater certainty to whether or not a VEC exists. The Tier 2 screening involve a Plume Test and Critical Distance Determination. **The Critical Distance Determination requires that the edge of the plume be known.** The Critical Distance is the lineal distance in any direction between the nearest edge of the contaminated plume and the nearest SP boundary.

**A Tier 2 Screening was not warranted for the subject property.**

## **CONCLUSIONS**

### **(1) Conclusions:** Impact on Subject Property

- A VEC exists
- A VEC does not exist

---

<sup>i</sup> Buonicore, A.J., 2011, Methodology for Identifying the Area of Concern Around a Property Potentially Impacted by Vapor Migration from Nearby Contaminated Sources, Paper #2011-A-301-AWMA.

**Appendix F -  
Qualifications of the Environmental  
Professionals**

# **DIANE M. BECKER**

---

## **POSITION**

SENIOR GEOLOGIST

## **EDUCATION**

B.A. Geological Sciences - Whittier College (California)

## **PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS**

California Professional Geologist No. 7469

## **DUTIES**

Ms. Becker is responsible for the preparation of various correction action plans and the implementation of various investigative and remediation projects. She has extensive experience in designing remediation systems, including soil vapor extraction and groundwater extraction. Ms. Becker also has extensive experience researching and preparing Phase I Environmental Assessments throughout the western United States.

## **EMPLOYMENT HISTORY**

2003 - Present:	Senior Geologist Advanced GeoEnvironmental, Inc.
1998 - 2003:	Staff Geologist Advanced GeoEnvironmental, Inc.
1987 - 1998:	Staff Geologist Clayton Group Services
1995 - 1997:	Intern Hydrogeologist Orange County Water District

# TIMOTHY J. CUELLAR

---

**POSITION** SENIOR GEOLOGIST

**EDUCATION** B.Sc. Geology - California State University, Fresno, 1993

**DUTIES** Mr. Cuellar is responsible for the management, design and implementation for various investigative and remediation projects. He has extensive experience in designing remediation systems for installation throughout California and is considered an expert in ground water extraction and soil vapor extraction techniques and implementation. Mr. Cuellar also has extensive experience in site assessment, underground storage tank investigations, infrastructure studies and landfill monitoring and remediation.

## EMPLOYMENT HISTORY

1999 - present: Project Geologist  
*Advanced GeoEnvironmental, Inc.*

1995 - 1999: Senior Staff Geologist  
*Advanced GeoEnvironmental, Inc., Stockton, California*

1993 - 1995: Project Geologist  
RM Associates, Fresno, California

1992 – 1993: Staff Geologist  
John M. Minney, Geotechnical Engineering, Madera, California



## ATTACHMENT B

### CITY OF CLAYTON PLANNING COMMISSION RESOLUTION NO.

---

#### **A RESOLUTION OF THE CLAYTON PLANNING COMMISSION RECOMMENDING ADOPTING THE FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM FOR THE DIABLO MEADOWS RESIDENTIAL SUBDIVISION PROJECT (ENV-01-20)**

**WHEREAS**, the City received an application from DeNova Homes, Inc. requesting review and consideration of an Environmental Review ENV-01-20; Zoning Map Amendment ZOA-02-20; Vesting Tentative Subdivision Map MAP-01-20; Development Plan Permit DP-01-20; and Tree Removal Permit TRP-09-20 for the subdivision and development of eighteen single-family residences and 5 parcels on approximately 8.6-acres ("Project"). The Diablo Meadows Residential Subdivision project site is located on the West of Mitchell Canyon Road and north/west of Herriman Court, APN's: 121-090-011-2 and 121-090-016-1; and

**WHEREAS**, the City prepared an Initial Study/Mitigated Negative Declaration ("IS/MND") and Mitigation Monitoring and Reporting Program (MMRP) to evaluate the potential environmental impacts of the Project, in accordance with Section 15063 of Title 14 of the California Code of Regulations, the California Environmental Quality Act ("CEQA") Guidelines; and

**WHEREAS**, a draft IS/MND were duly noticed and circulated for a 20-day review period, with the public review comment period commencing on September 15, 2020 and ending October 5, 2020; and

**WHEREAS**, the custodian of the Final IS/MND is the Community Development Department and the Final IS/MND is available for public review at City Hall in the Community Development Department and the MMRP is attached as Exhibit A, the Errata is attached as Exhibit B, and the Response to Comments is attached as Exhibit C to this Resolution, and;

**WHEREAS**, the Clayton Planning Commission has reviewed the IS/MND for the Project and the comments received during the public review comment period; and

**WHEREAS**, proper notice of this public hearing was given in all respects as required by law; and

**WHEREAS**, on October 27, 2020, the Clayton Planning Commission held a duly-noticed public hearing on the IS/MND and MMRP, received and considered testimony and evidence, both oral and documentary, and approved and adopted the Final IS/MND and MMRP with the attached errata sheets, and Response to Comments; and

**NOW, THEREFORE, BE IT RESOLVED**, as follows:

1. The foregoing recitals are true and correct.
2. The Clayton Planning Commission hereby finds, on the basis of the whole record before it (including the IS/MND, MMRP, and all comments received) that:

Planning Commission  
Resolution No. 02-2020

- a. The City of Clayton exercised overall control and direction over the CEQA review for the Project, including the preparation of the Final IS/MND and MMRP, and independently reviewed the Final IS/MND and MMRP; and
  - b. There is no substantial evidence that the Project will have a significant effect on the environment once mitigation measures have been followed; and
  - c. The Final IS/MND and MMRP reflect the City's independent judgment and analysis.
3. The Clayton Planning Commission hereby approves and adopts the Diablo Meadows Residential Subdivision Initial Environmental Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

**PASSED AND ADOPTED** by the Planning Commission of the City of Clayton at a regular meeting on the \_\_\_\_ day of \_\_\_\_\_, 2020.

APPROVED:

ATTEST:

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Matthew Feske  
Community Development Director

Exhibit A: Diablo Meadows Residential Subdivision Project Mitigation Monitoring and Reporting Program

Exhibit B: Errata Sheet

Exhibit C: Response to Comments

# ATTACHMENT C

CITY OF CLAYTON  
PLANNING COMMISSION  
RESOLUTION NO. \_\_- 2020

---

**A RESOLUTION RECOMMENDING AMENDING THE ZONING MAP AND MUNICIPAL CODE 17.78.040  
FOR THE DIABLO MEADOWS RESIDENTIAL SUBDIVISION**

**(ZOA-02-20)**

**WHEREAS**, the City received an application from DeNova Homes, Inc. requesting review and consideration of an Environmental Review ENV-01-20; Zoning Map & Municipal Code Amendment ZOA-02-20; Vesting Tentative Subdivision Map MAP-01-20; Development Plan Permit DP-01-20; and Tree Removal Permit TRP-09-20 for the subdivision and development of eighteen single-family residences and 5 parcels on approximately 8.6-acres ("Project"). The Diablo Meadows Residential Subdivision project site is located on the West of Mitchell Canyon Road and north/west of Herriman Court, APN's: 121-090-011-2 and 121-090-016-1; and

**WHEREAS**, the Planning Commission held a duly-noticed public hearing on October 27, 2020 on amendment of the *Zoning Map* to change the land use R-15 designation to Planned Development of the Diablo Meadows site; and

**WHEREAS**, the proposed Planned Development in the Diablo Meadows Residential Subdivision is compatible with the existing Planned Development PD, R-12, and R-15 designations adjacent to the project site; and

**WHEREAS**, the proposed amendment is in general conformance with the *Official Zoning Map*, is in the public interest, and fully complies with the Growth Management Program of the Contra Costa Transportation Authority; and

**WHEREAS**, a draft IS/MND were duly noticed and circulated for a 20-day review period, with the public review comment period commencing on September 15, 2020 and ending October 5, 2020; and

**WHEREAS**, there is no evidence that the proposed amendment will have the potential for any individual or cumulative adverse effect on fish and wildlife resources or their habitat, as defined in Section 711.2 of the Fish and Wildlife Code.

**WHEREAS**, proper notice of this public hearing was given in all respects as required by law; and

**NOW, THEREFORE, BE IT RESOLVED**, as follows:

1. The foregoing recitals are true and correct.
2. The Clayton Planning Commission hereby finds, on the basis of the whole record before it that:

Planning Commission  
Resolution No. \_\_-2020

A. That the proposed amendment is in general conformance with the General Plan adopted by the City;

B. That the public necessity, conveniences, and general welfare require the adoption of the proposed amendment.

**PASSED AND ADOPTED** by the Planning Commission of the City of Clayton at a regular meeting on the \_\_\_\_ day of \_\_\_\_\_, 2020.

APPROVED:

ATTEST:

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Matthew Feske  
Community Development Director

Exhibit A: Diablo Meadows Zoning Exhibit

Exhibit B: MC 17.78.040 – Modifications to Exemptions Text



**BOARD OF DIRECTORS**

Lisa M. Borba, AICP  
PRESIDENT

Connstance Holdaway  
VICE PRESIDENT

Ernesto A. Avila, P.E.

Bette Boatman

John A. Burgh

**GENERAL MANAGER**

Stephen J. Welch, P.E., S.E.

August 28, 2020

*Sent via Hard Copy and Email: cgregory@grounddc.com*

Christine Gregory  
Community Development Department  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

**Subject: Diablo Meadows Project (Project #1078)**

Dear Ms. Gregory:

The Contra Costa Water District (CCWD/ District) is in receipt of the City of Clayton's request for comments related to the abovementioned project. The Proposed Project will subdivide 8.68 acres into 18 Residential lots and 5 parcels. This project will require rezoning from R-15 (Single Family Residential) to a Planned Unit District, a Development Permit to construct 18 homes, and a Tree Removal Permit to remove 33 trees. The APNs are 121-090-011-2 and 121-090-016-1.

The project site is located entirely within the service boundary of the CCWD. The District will provide treated (potable) water services to the Project (per CCWD Code of Regulations Section 5). The following are the District's comments:

- 1) Each of the individual single-family residences (SFR) will require 1-inch services w/ 1-inch meter and 1-inch backflow devices to support the fire sprinkler system. The SFRs that have accessory dwelling units will be required to pay a larger facility reserve charge.
- 2) CCWD recommends that the water main line in this development be looped.
- 3) Water service may require above ground backflow prevention devices, which could reduce water pressure to below standard. Proper planning is necessary to ensure backflow prevention devices are located appropriately.
- 4) Existing water infrastructure will need to be evaluated and any modifications will need to be designed and constructed at the Developer's/Owner's expense.
- 5) Each premise to be provided domestic service will require its own service connection and meter.

Christine Gregory  
Community Development Department  
City of Clayton  
August 28, 2020  
Page 2

- 6) A separate meter for landscape irrigation may be required.
- 7) Relocation and/or abandonment of CCWD facilities may be required which will require a quitclaim of the existing easements. Easements for proposed facilities may also be required.
- 8) The water main in the street or right of way shall be located opposite the proposed meter locations, with sufficient capacity and pressure as determined by CCWD. The Project/Property may require a main extension or addition of other infrastructure.
- 9) Relocation of public facilities must be performed by District forces.
- 10) The State Water Resources Control Board (SWRCB) mandates certain separation requirements of water mains that are parallel to and/or crossing sewer and storm drains. Grading and/or utility plans should be developed to comply with all separation criteria mandated in SWRCB Section 64572.
- 11) The California Residential Code requires installation of an approved automatic fire sprinkler system in all new residential structures that are submitted to the Building Department after December 31, 2010. Appropriate backflow prevention is required for all services where sprinkler systems are installed.
- 12) Further information and answers to a number of frequently asked questions regarding water service and District regulations can be found on the District's web site at [www.ccwater.com](http://www.ccwater.com).

Should you require any further clarification on the District's comments, please contact Cindy Sweeney/Engineering Department at 925-688-8014.

Sincerely,



Christine Schneider  
Senior Planner

CS:ck

# ATTACHMENT D

## ORDINANCE NO.XXX OCTOBER , 2020

### A RESOLUTION OF THE CITY OF CLAYTON CITY COUNCIL APPROVING REZONE OF THE DIABLO MEADOWS RESIDENTIAL SUBDIVISION FROM R-15 TO PLANNED DEVELOPMENT AND AMENDING MUNICIPAL CODE 17.78.040.D FLOOR AREA;

**WHEREAS**, the City received an application from DeNova Homes, Inc. requesting review and consideration of an Environmental Review ENV-01-20; Zoning Map & Municipal Code Amendment ZOA-02-20; Vesting Tentative Subdivision Map MAP-01-20; Development Plan Permit DP-01-20; and Tree Removal Permit TRP-09-20 for the subdivision and development of eighteen single-family residences and 5 parcels on approximately 8.6-acres (“Project”). The Diablo Meadows Residential Subdivision project site is located on the West of Mitchell Canyon Road and north/west of Herriman Court, APN’s: 121-090-011-2 and 121-090-016-1; and

**WHEREAS**, it is proposed that the zoning map for the City of Clayton be amended for consistency with the Diablo Meadows Residential Subdivision (the project); and

**WHEREAS**, it is proposed that the Clayton Municipal Code section 17.78.040.D Exemptions be amended for consistency with the Diablo Meadows Residential Subdivision (the project); and

**WHEREAS**, the City determined that the Project is subject to the California Environmental Quality Act (CEQA); and

**WHEREAS**, the City prepared an Initial Study/Mitigated Negative Declaration (“IS/MND”) and Mitigation Monitoring and Reporting Program (MMRP) to evaluate the potential environmental impacts of the Project, in accordance with Section 15063 of Title 14 of the California Code of Regulations, the California Environmental Quality Act (“CEQA”) Guidelines; and

**WHEREAS**, a draft IS/MND were duly noticed and circulated for a 20-day review period, with the public review comment period commencing on September 15, 2020 and ending October 5, 2020; and

**WHEREAS**, the Planning Commission held a duly noticed public hearing on October ---, 2020, as required by law to consider all of the information presented by staff, information presented by the Applicant, and public testimony presented in writing and at the meeting.

**Findings:** Development Plan Permit for a Planned Development District is granted as the Planning Commission and/or City Council made the following findings:

## ATTACHMENT D

- A. That the application of the Planned Development District, as proposed, will result in a significantly better quality development than would occur with a non-flexible zone and that the requirements for a development permit have been thoroughly evaluated;
- B. That project as conditioned complies with the open space requirements of Clayton Municipal Code CMC 17.28.100;
- C. That the development is consistent with the City's General Plan;
- D. That the development will be compatible with and in harmony and character with the City as a whole and with adjoining areas and uses;
- E. That the development's environmental impacts have been reviewed pursuant to CEQA; and
- G. The applicant intends to start construction within the allotted time as specified in CMC 17.28.190 (18 months after City Council approval of project).

**AND, BE IT FURTHER RESOLVED**, that the Planning Commission of the City of Clayton hereby recommends that the City Council adopt an Ordinance amending the City of Clayton Zoning Map and Municipal Code as illustrated and described in Exhibits A & B (incorporated herein by this reference) based upon the following finding:

### **Rezoning**

Finding: The proposed zoning amendments are consistent with the General Plan goals, policies, and implementation programs.

Evidence: The proposed rezoning is consistent with the General Plan, specifically Land Use Objective 1 To retain the rural character of Clayton through a predominance but not exclusive use of single-family, low-density residential development balancing needs of the housing element and preservation of open space.

**PASSED AND ADOPTED** by the Planning Commission of the City of Clayton at a regular meeting on the \_\_\_\_ day of \_\_\_\_\_, 2020.

APPROVED:

ATTEST:

---

Chair

---

Matthew Feske  
Community Development Director



## ATTACHMENT D

ATTACHMENT E

CITY OF CLAYTON  
PLANNING COMMISSION  
RESOLUTION NO. \_\_\_ - 2020

---

**A RESOLUTION RECOMMENDING APPROVAL OF THE VESTING TENTATIVE MAP (MAP-01-20), DEVELOPMENT PLAN PERMIT (DP-01-20), AND TREE REMOVAL PERMIT (TP-09-20) FOR THE DIABLO MEADOWS RESIDENTIAL SUBDIVISION LOCATED ON THE WEST OF MITCHELL CANYON ROAD AND NORTH/WEST OF HERRIMAN COURT**

**WHEREAS**, the City received an application from DeNova Homes, Inc. requesting review and consideration of an Environmental Review ENV-01-20; Zoning Map Amendment ZOA-02-20; Vesting Tentative Subdivision Map MAP-01-20; Development Plan Permit DP-01-20; and Tree Removal Permit TRP-09-20 for the subdivision and development of eighteen single-family residences and 5 parcels on approximately 8.6-acres (“Project”). The Diablo Meadows Residential Subdivision project site is located on the West of Mitchell Canyon Road and north/west of Herriman Court, APN’s: 121-090-011-2 and 121-090-016-1; and

**WHEREAS**, the Planning Commission held a duly-noticed public hearing on October 27, 2020 on the proposed project amendments and plans, for the 18-lot Diablo Meadows Residential Subdivision located on the West of Mitchell Canyon Road and north/west of Herriman Court, APN’s: 121-090-011-2 and 121-090-016-1; and

**WHEREAS**, the proposed Planned Development designation for the project site is consistent with the amendments of the Rezone to Planned Unit Development; and

**WHEREAS**, the proposed Vesting Tentative Map, Development plan, and Tree removal Plans for the Diablo Meadows Residential Subdivision are compatible with the existing R-12, R-15, and Planned Development designations adjacent to the project site; and

**WHEREAS**, the proposed Vesting Tentative Map, Development plan, and Tree removal Plans are in general conformance with one another, is in the public interest, and fully complies with the Growth Management Program of the Contra Costa Transportation Authority; and

**WHEREAS**, a draft IS/MND were duly noticed and circulated for a 20-day review period, with the public review comment period commencing on September 15, 2020 and ending October 5, 2020; and

**WHEREAS**, there is no evidence that the proposed residential subdivision will have the potential for any individual or cumulative adverse effect on fish and wildlife resources or their habitat, as defined in Section 711.2 of the Fish and Wildlife Code.

**WHEREAS**, proper notice of this public hearing was given in all respects as required by law; and

**NOW, THEREFORE, BE IT RESOLVED,** as follows:

1. The foregoing recitals are true and correct.
2. The Clayton Planning Commission hereby finds, on the basis of the whole record before it that the proposed subdivision, together with its provisions for its design and improvements, is consistent with applicable general or specific plans of the city and conforms to the applicable zoning regulations as amended.

**PASSED AND ADOPTED** by the Planning Commission of the City of Clayton at a regular meeting on the \_\_\_\_ day of \_\_\_\_\_, 2020.

APPROVED:

ATTEST:

---

Chair

---

Matthew Feske  
Community Development Director



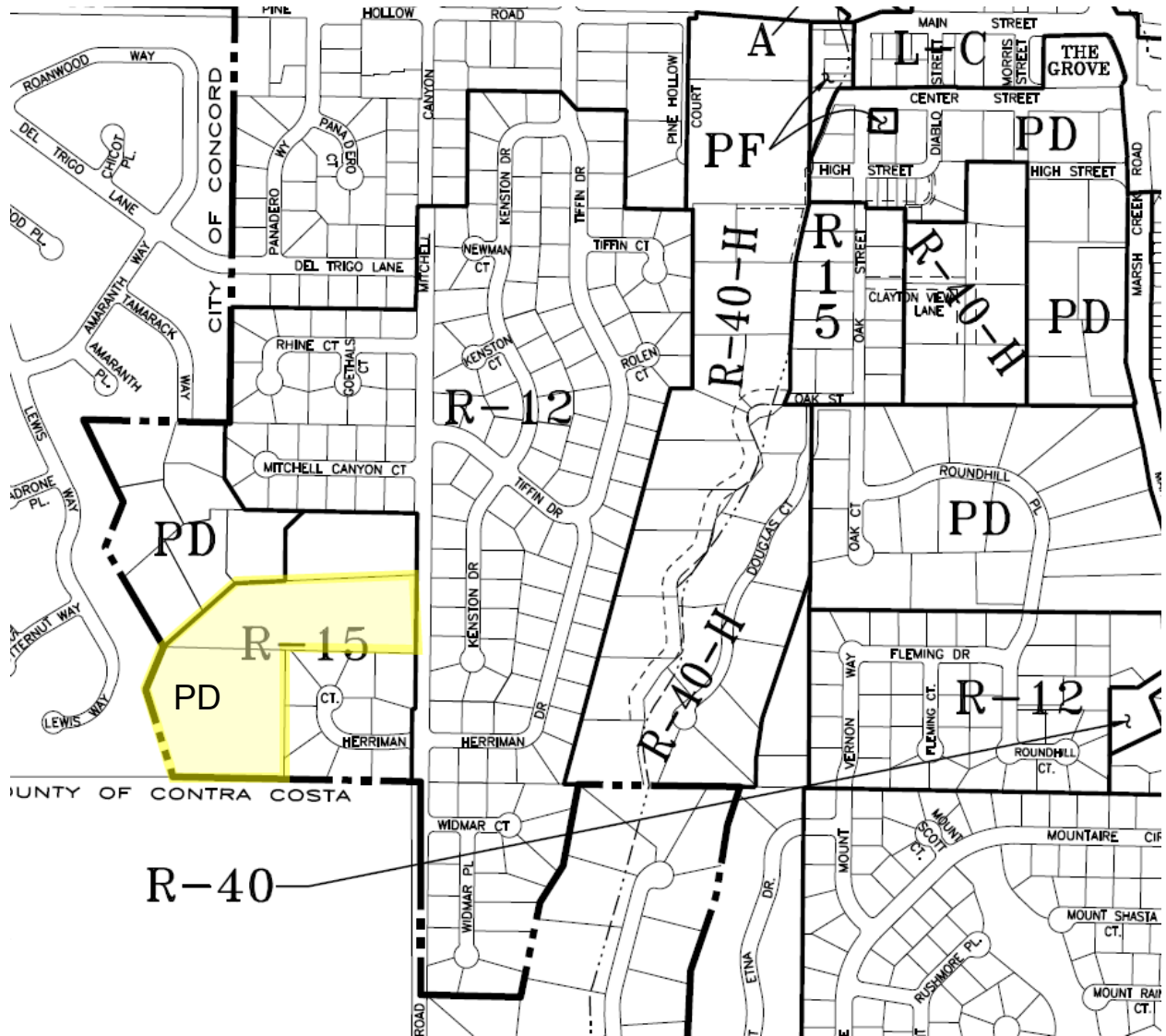
ATTACHMENT G - EXHIBIT A  
Zoning Map Amendment Exhibit

CITY OF CLAYTON

ZONING MAP EXCERPT (JANUARY 2017)

Proposed "Diablo Canyon Site" on Mitchell Canyon Road

Zoning Designation: R-15



# Attachment H

## EXHIBIT B

Text Modification to Clayton Municipal Code Chapter 17.78 - RESIDENTIAL FLOOR AREA  
Specifically adding Diablo Meadows Subdivision Tract 9536 to section 17.78.040.D –  
Exemptions\_(modifications in yellow highlight)

### 17.78.040 - Exemptions.

The following types of projects are exempt from the building footprint and floor area limitations of this [Chapter 17.78](#).

A. Fill-in Additions. Additions of newly created habitable space, which are to be fully contained within the building envelope of any existing conforming or nonconforming single-family residential building, as determined by the Community Development Director. Examples include excavation and improvement of areas behind the skirt walls of hillside residences, improvement of attic spaces, and limited exterior changes such as the addition of dormers (not exceeding interior height of eight (8) feet), windows and doors.

B. Small Additions. Any addition or accessory building of less than two hundred (200) square feet, provide that no approvals for either a new residence, an exterior addition, or a small addition exemption have been granted within the past five (5) years from the time of the subject application, and a variance is not requested.

C. Damaged or Destroyed Buildings. Any legally constructed building which is destroyed or damaged by fire, flood, wind, earthquake, war, riot, or other calamity or act of God may be reconstructed to its original building footprint and floor area in substantially the same location.

D. Designated Planned Developments. Residences in the Chaparral Springs (Tracts 7303 and 7066), Dana Ridge (Tract 4504), Diablo Ridge (Tract 7766 (exclusive of detached residences on Condor Way and Keller Ridge Drive) and Tract 7767), Marsh Creek Park Villas (Tract 4240), **and** Stranahan (Tract 7887), **and Diablo Meadows (Tract 9536)** Planned Developments. (Any additions or accessory buildings in these Planned Developments will continue to be subject to the site plan review requirements and the development standards originally approved for the respective Planned Development.)

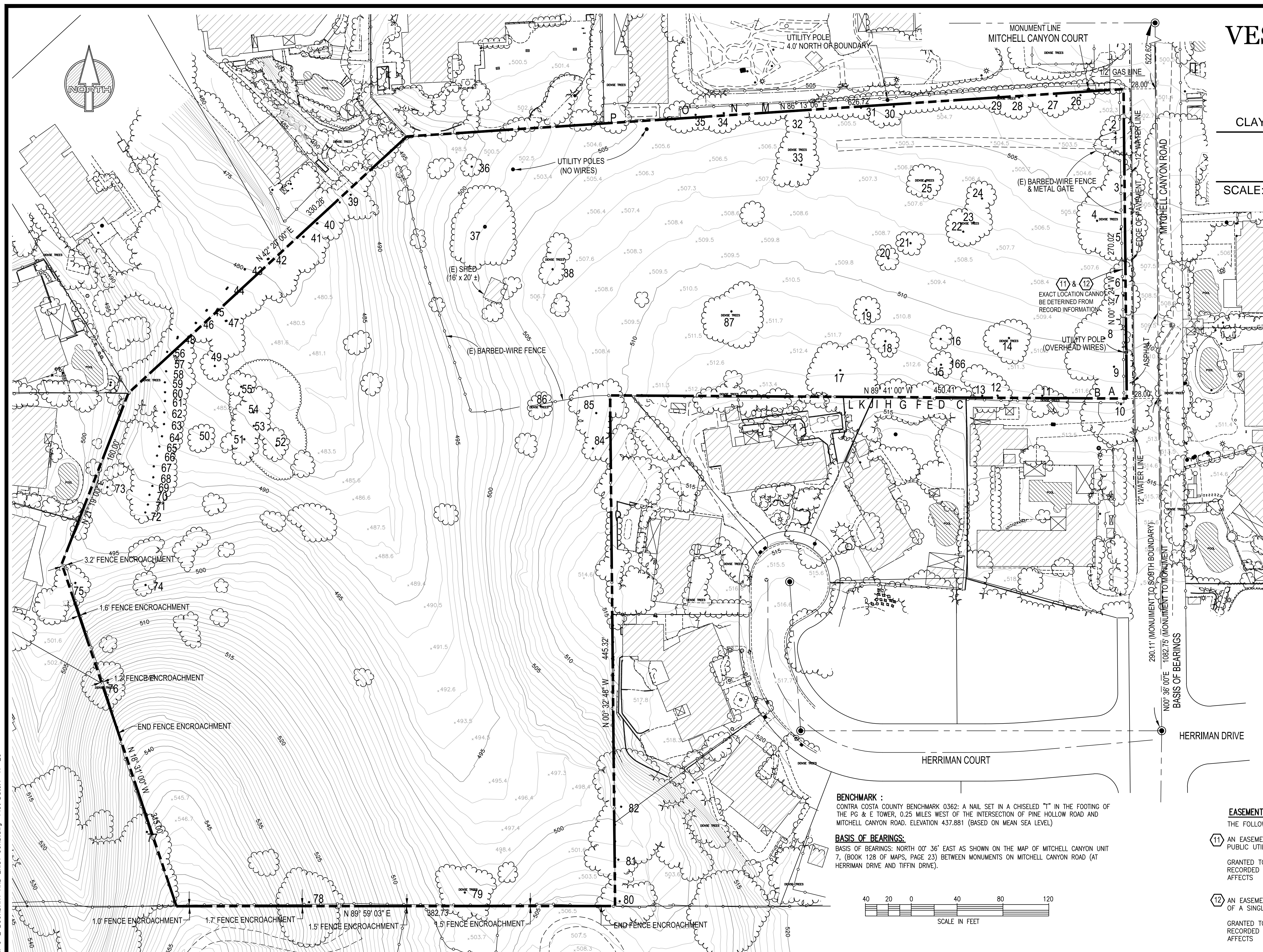
(Ord. 375, 2004)



# VESTING TENTATIVE MAP FOR SUBDIVISION 9536 DIABLO MEADOWS CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA

## BOUNDARY AND EXISTING CONDITION

SCALE: AS SHOWN APRIL, 2020



### LEGEND & ABBREVIATIONS

	PROPERTY BOUNDARY		FOUND STANDARD CITY STREET MONUMENT
	RIGHT OF WAY		FOUND SURVEY MONUMENT AS NOTED
	EASEMENT		MANHOLE (TYPE AS NOTED)
	STORM DRAIN LINE		CATCH BASIN (ADJACENT TO MANHOLE TYPICAL)
	SEWER LINE		CATCH BASIN(S)
	FOUND STANDARD CITY STREET MONUMENT		WATER VALVE
	FOUND SURVEY MONUMENT AS NOTED		STREET LIGHT (PRIVATE)
	MANHOLE (TYPE AS NOTED)		STREET LIGHT (PUBLIC)
	CATCH BASIN (ADJACENT TO MANHOLE TYPICAL)		UTILITY BOX/VAULT (TYPE AS NOTED)
	CATCH BASIN(S)		TREE TRUNK LOCATION (SEE ARBORIST REPORT)
	WATER VALVE		SIGN
	STREET LIGHT (PRIVATE)		
	STREET LIGHT (PUBLIC)		
	UTILITY BOX/VAULT (TYPE AS NOTED)		
	TREE TRUNK LOCATION (SEE ARBORIST REPORT)		
	SIGN		

BFP	BACKFLOW PREVENTER	JP	POWER POLE (JOINT SERVICE)
C	CONCRETE	SD	STORM DRAIN
CB	CATCH BASIN (STORM DRAIN INLET)	SDMH	STORM DRAIN MANHOLE
CO	CLEANOUT	SF	SQUARE FEET
DWY	DRIVEWAY	SL	STREET LIGHT
E	ELECTRICAL (PG&E)	SS	SANITARY SEWER
(E)	EXISTING	SSMH	SANITARY SEWER MANHOLE
F	FIRE (WATER) SERVICE LINE	T	TELEPHONE
FDC	FIRE DEPARTMENT CONNECTION	W	(COMMUNICATIONS, SBC, PG&E)
FH	FIRE HYDRANT	WM	WATER MAIN
G	GAS	WM	WATER METER
GV	GAS VALVE	WV	WATER VALVE

**BENCHMARK :**  
CONTRA COSTA COUNTY BENCHMARK 0362: A NAIL SET IN A CHISELED "T" IN THE FOOTING OF THE PG & E TOWER, 0.25 MILES WEST OF THE INTERSECTION OF PINE HOLLOW ROAD AND MITCHELL CANYON ROAD. ELEVATION 437.881 (BASED ON MEAN SEA LEVEL)

**BASIS OF BEARINGS:**  
BASIS OF BEARINGS: NORTH 00° 36' EAST AS SHOWN ON THE MAP OF MITCHELL CANYON UNIT 7, (BOOK 128 OF MAPS, PAGE 23) BETWEEN MONUMENTS ON MITCHELL CANYON ROAD (AT HERRIMAN DRIVE AND TIFFIN DRIVE).

**EASEMENTS** (NUMBERING AND LANGUAGE CORRESPONDS WITH THE TITLE REPORT)  
THE FOLLOWING EASEMENTS AFFECT PARCEL 1:

**11** AN EASEMENT FOR CONSTRUCTION, INSTALLATION, MAINTENANCE, REPAIR AND OPERATION OF PUBLIC UTILITIES AND INCIDENTAL PURPOSES.

GRANTED TO : PACIFIC TELEPHONE AND TELEGRAPH COMPANY  
RECORDED : SEPTEMBER 16, 1914 IN BOOK 227 OF DEEDS, PAGE 283  
AFFECTS : THE NORTHWEST 1/4 OF SECTION 14 (DESCRIBES THE WHOLE PROPERTY; EXISTING LINES ARE LOCATED ALONG THE MITCHELL CANYON ROAD RIGHT OF WAY)

**12** AN EASEMENT FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, REPAIR AND OPERATION OF A SINGLE LINE OF POLES, TELEPHONE AND TELEGRAPH LINES AND INCIDENTAL PURPOSES.

GRANTED TO : VALLEY PIPE LINE COMPANY, A CALIFORNIA CORPORATION  
RECORDED : MAY 20, 1915 IN BOOK 241 OF DEEDS, PAGE 331  
AFFECTS : A PORTION OF THE NORTHWEST 1/4 OF SECTION 14 (DESCRIBES THE WHOLE PROPERTY; EXISTING LINES ARE LOCATED ALONG THE MITCHELL CANYON ROAD, RIGHT OF WAY)

DATE: MARCH, 2020			
SCALE:			
DRAWN: TJB/YPS			
DESIGNED: HK/TB			
ENGINEER: JR/YS			
MANAGER: HK			
NO.	BY	DATE	REVISIONS

PREPARED BY, OR UNDER THE DIRECTION OF:

**MERIDIAN ASSOCIATES, INC.**  
CIVIL ENGINEERING • PLANNING • SURVEYING

1300A WILLOW PASS COURT  
CONCORD, CA 94520

PHONE: 925-691-7300  
FAX: 925-691-7110

**DeNova Homes**

1500 WILLOW PASS COURT, CONCORD, CA 94520  
PHONE 925-685-0110 FAX 925-685-0660

SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS SHEET NO. **C-2** OF 6 SHEETS

# BOUNDARY AND EXISTING CONDITION

CLAYTON CONTRA COSTA COUNTY CALIFORNIA

JOB NO. 18-16-00

M:\Jobs\18-16-00\TM C-2 BOUNDARY AND EXIST COND.dwg Plot Date: 7-17-20



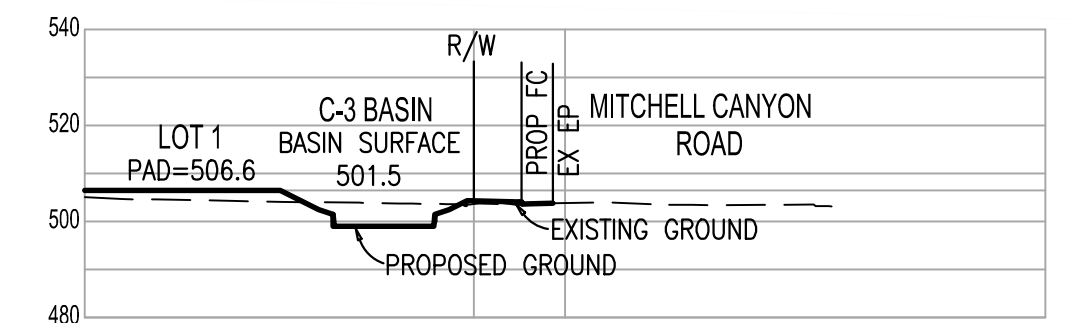
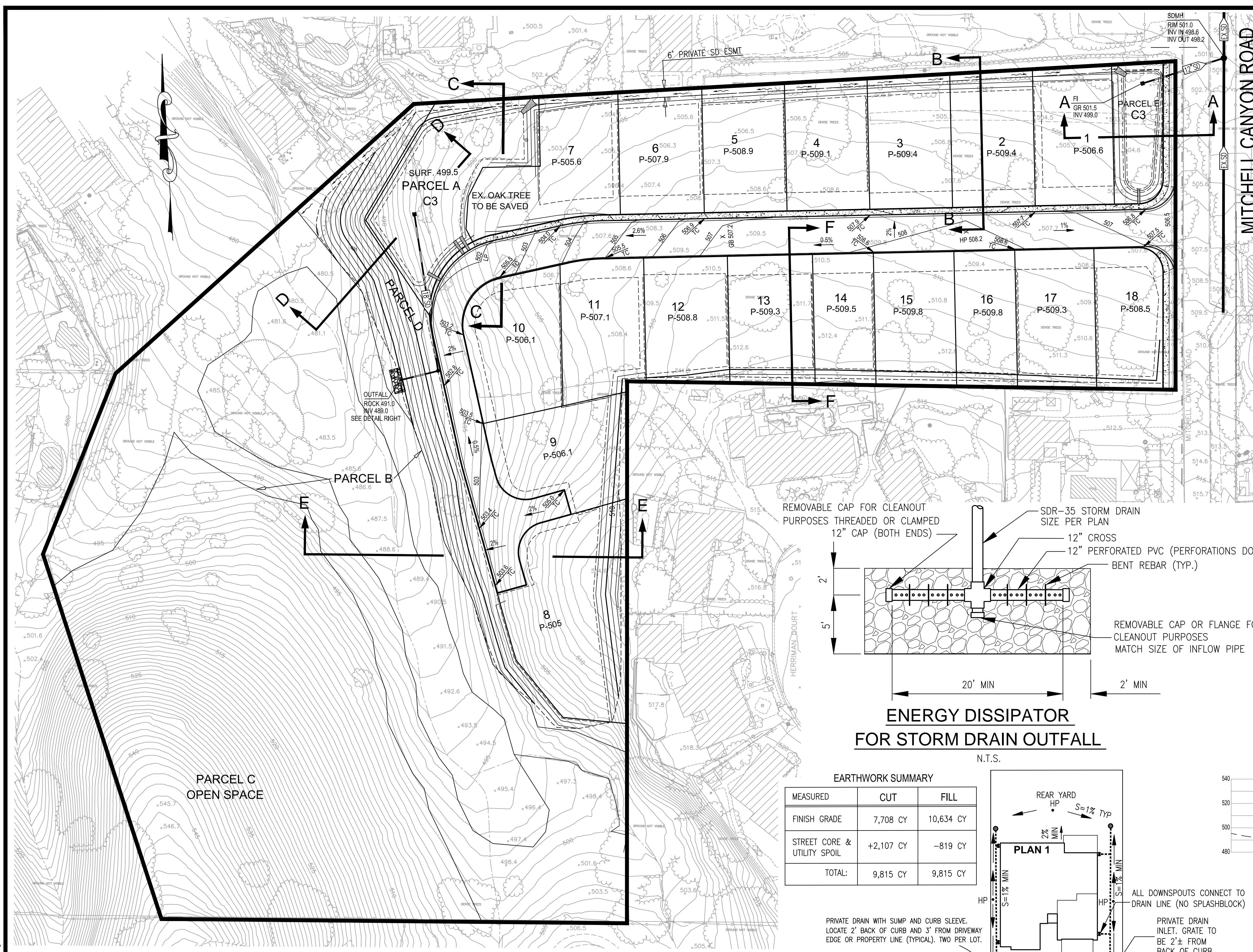
# VESTING TENTATIVE MAP FOR SUBDIVISION 9536 DIABLO MEADOWS

CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA

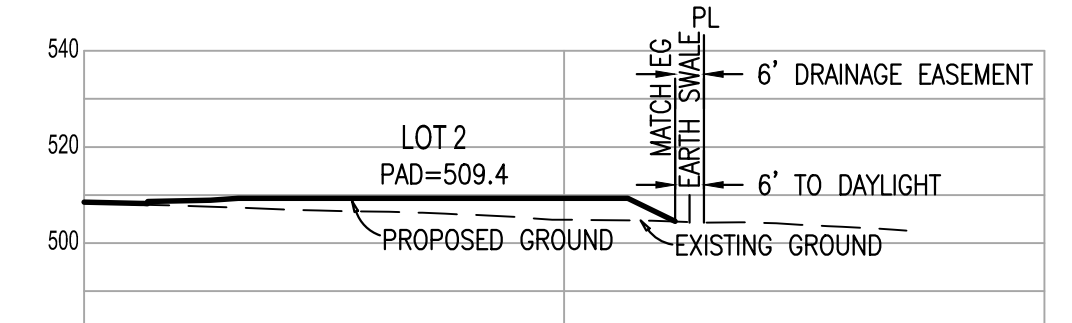
## PRELIMINARY GRADING AND DRAINAGE PLAN

SCALE: AS SHOWN

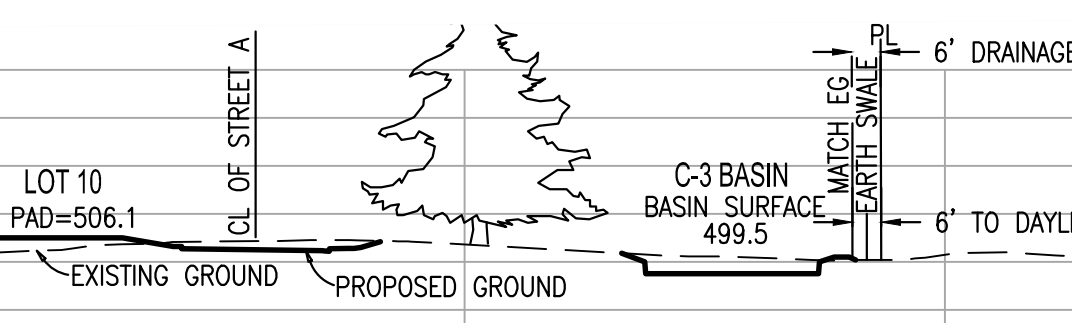
APRIL, 2020  
UPDATED: JULY, 2020



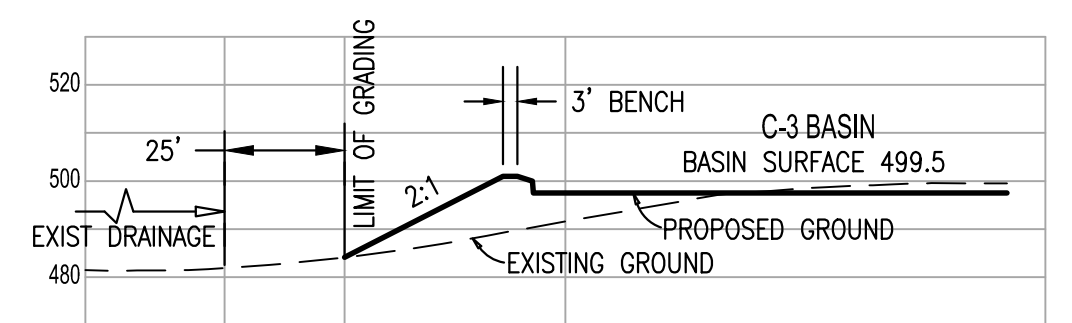
SECTION A-A



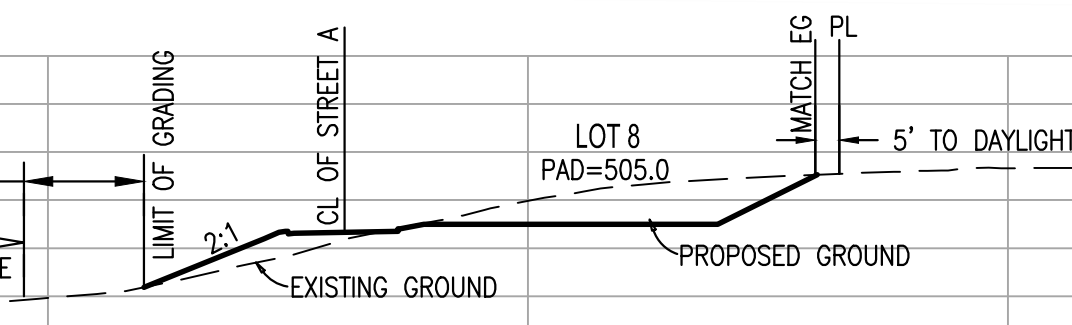
SECTION B-B



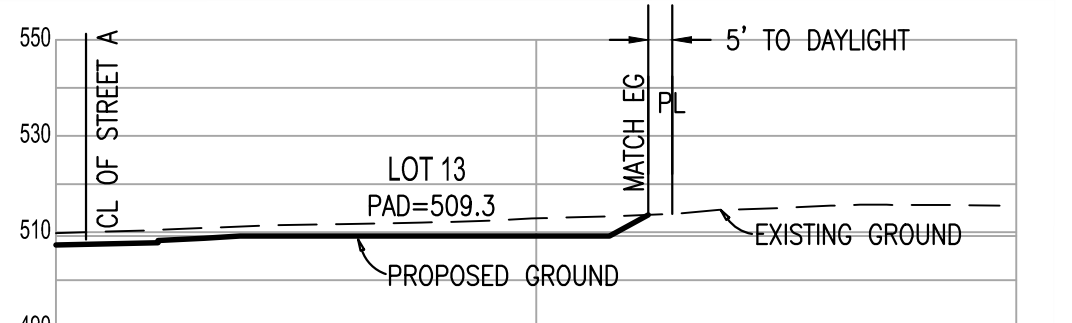
SECTION C-C



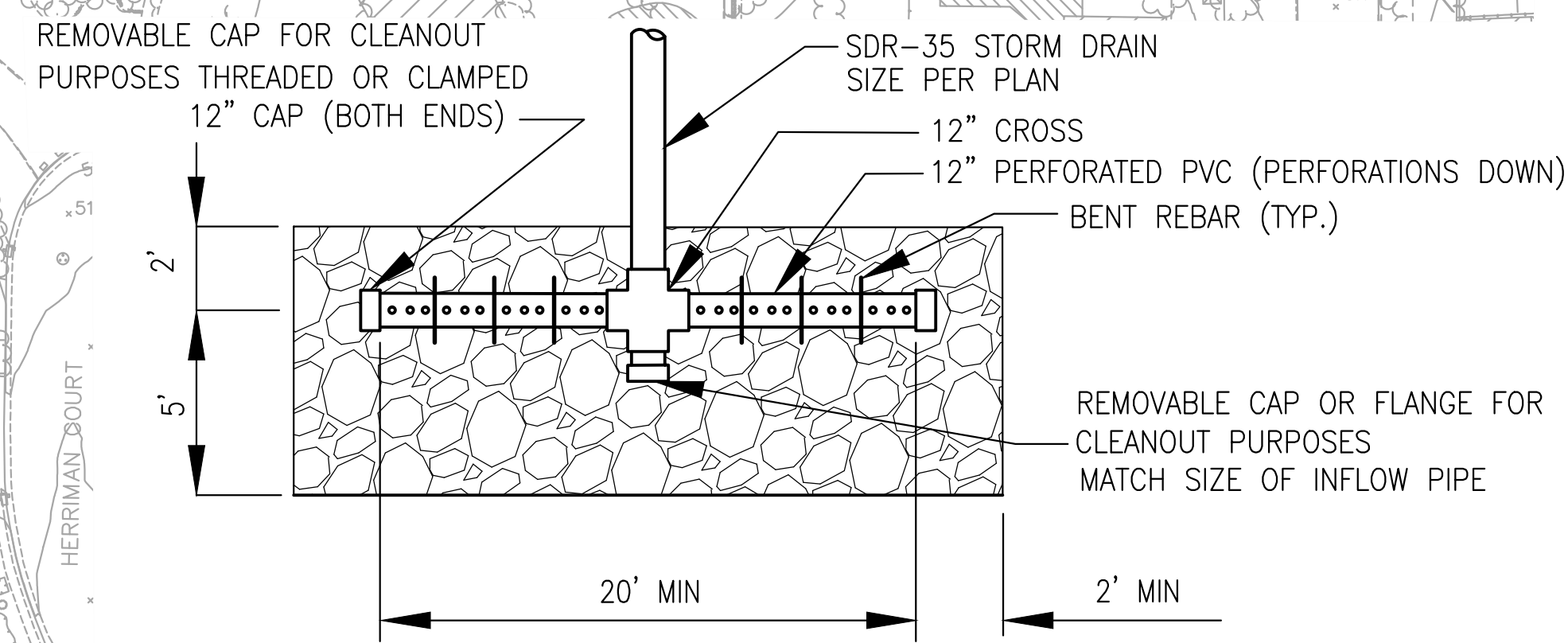
SECTION D-D



SECTION E-E



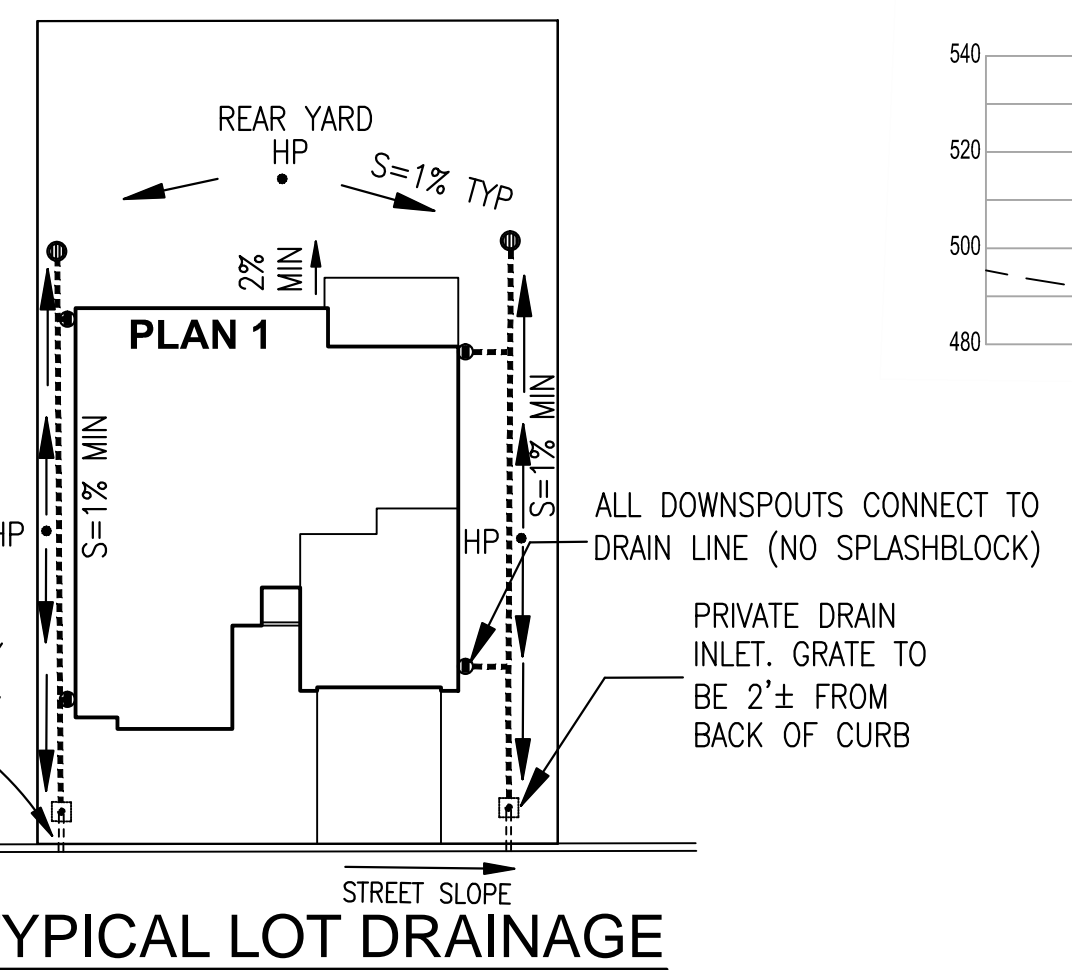
SECTION F-F



ENERGY DISSIPATOR  
FOR STORM DRAIN OUTFALL

EARTHWORK SUMMARY

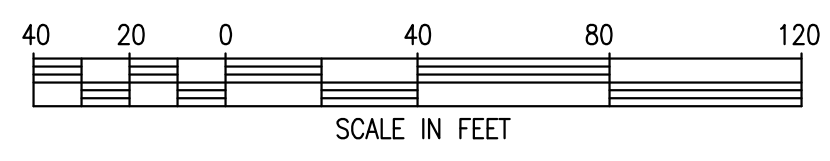
MEASURED	CUT	FILL
FINISH GRADE	7,708 CY	10,634 CY
STREET CORE & UTILITY SPOIL	+2,107 CY	-819 CY
TOTAL:	9,815 CY	9,815 CY



PRIVATE DRAIN WITH SUMP AND CURB SLEEVE. LOCATE 2' BACK OF CURB AND 3' FROM DRIVEWAY EDGE OR PROPERTY LINE (TYPICAL). TWO PER LOT.

ALL DOWNSPOUTS CONNECT TO DRAIN LINE (NO SPLASHBLOCK)

PRIVATE DRAIN INLET. GRATE TO BE 2'± FROM BACK OF CURB



GRADING & DRAINAGE PLAN  
SCALE: 1" = 40' HORIZONTAL & VERTICAL

DATE: MARCH, 2020	NO.	BY	DATE	REVISIONS
SCALE:				
DRAWN: TJB/YPS				
DESIGNED: HK/TB				
ENGINEER: JR/YYS				
MANAGER: HK				

PREPARED BY, OR UNDER THE DIRECTION OF:

**MERIDIAN ASSOCIATES, INC.**  
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SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS

## PRELIMINARY GRADING & DRAINAGE PLAN

CLAYTON CONTRA COSTA COUNTY CALIFORNIA

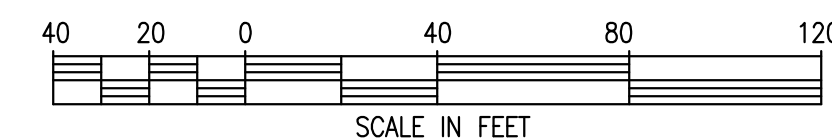
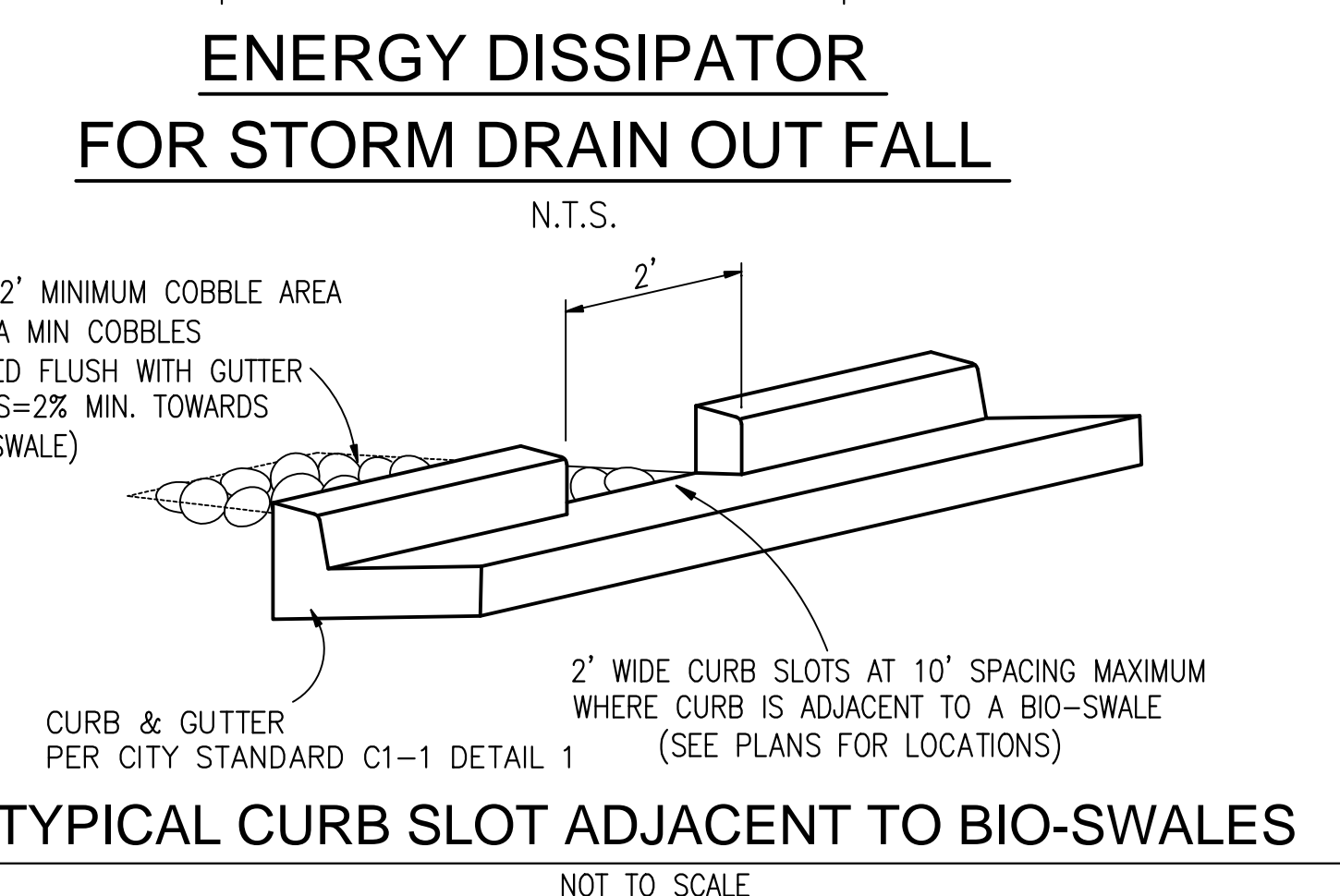
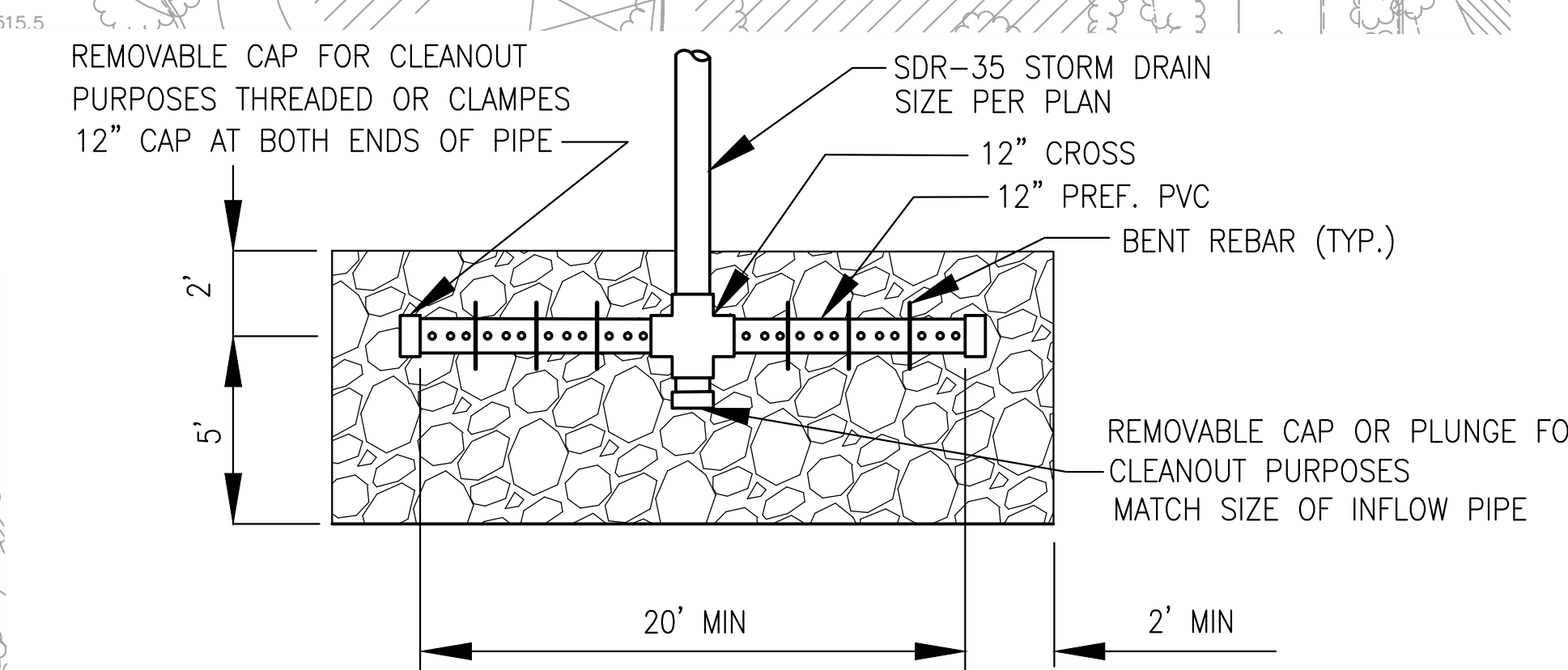
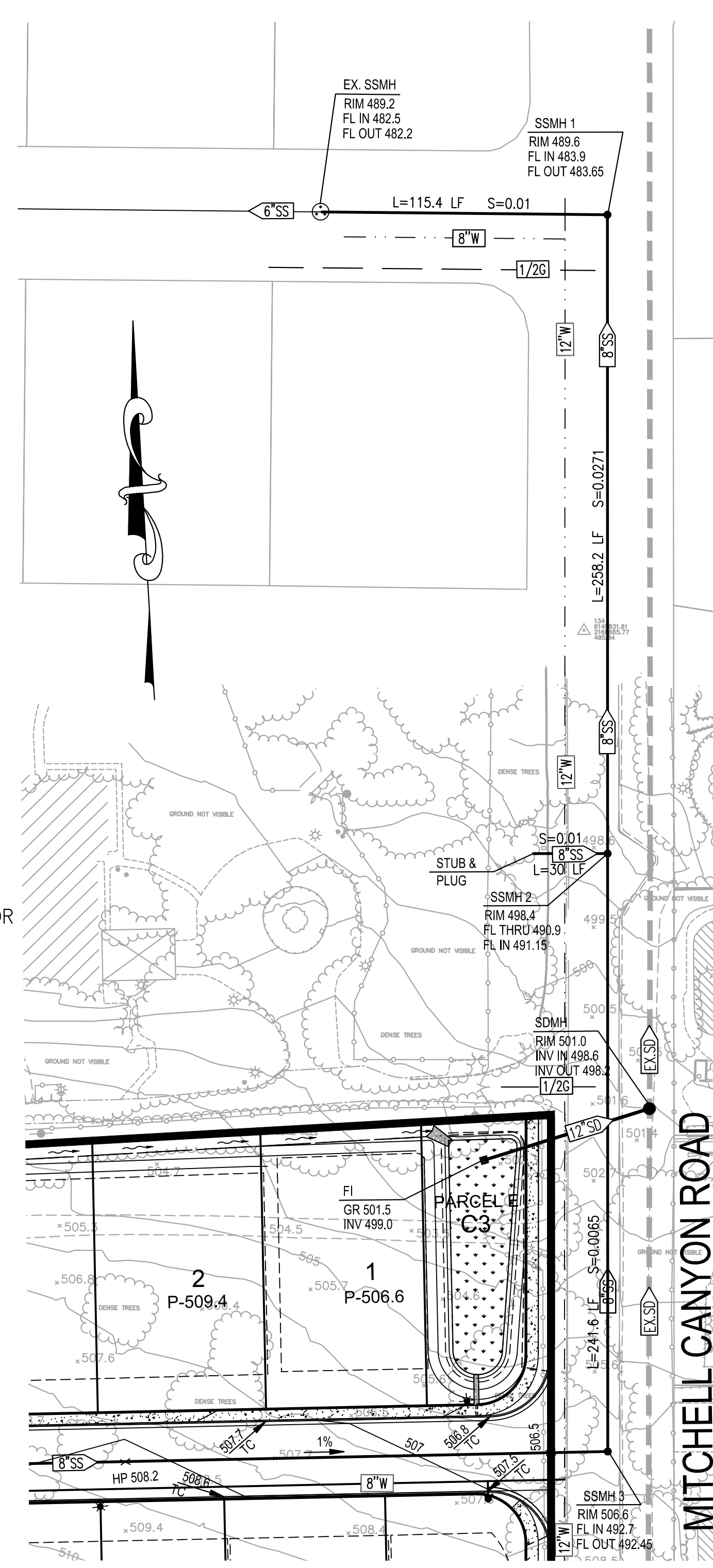
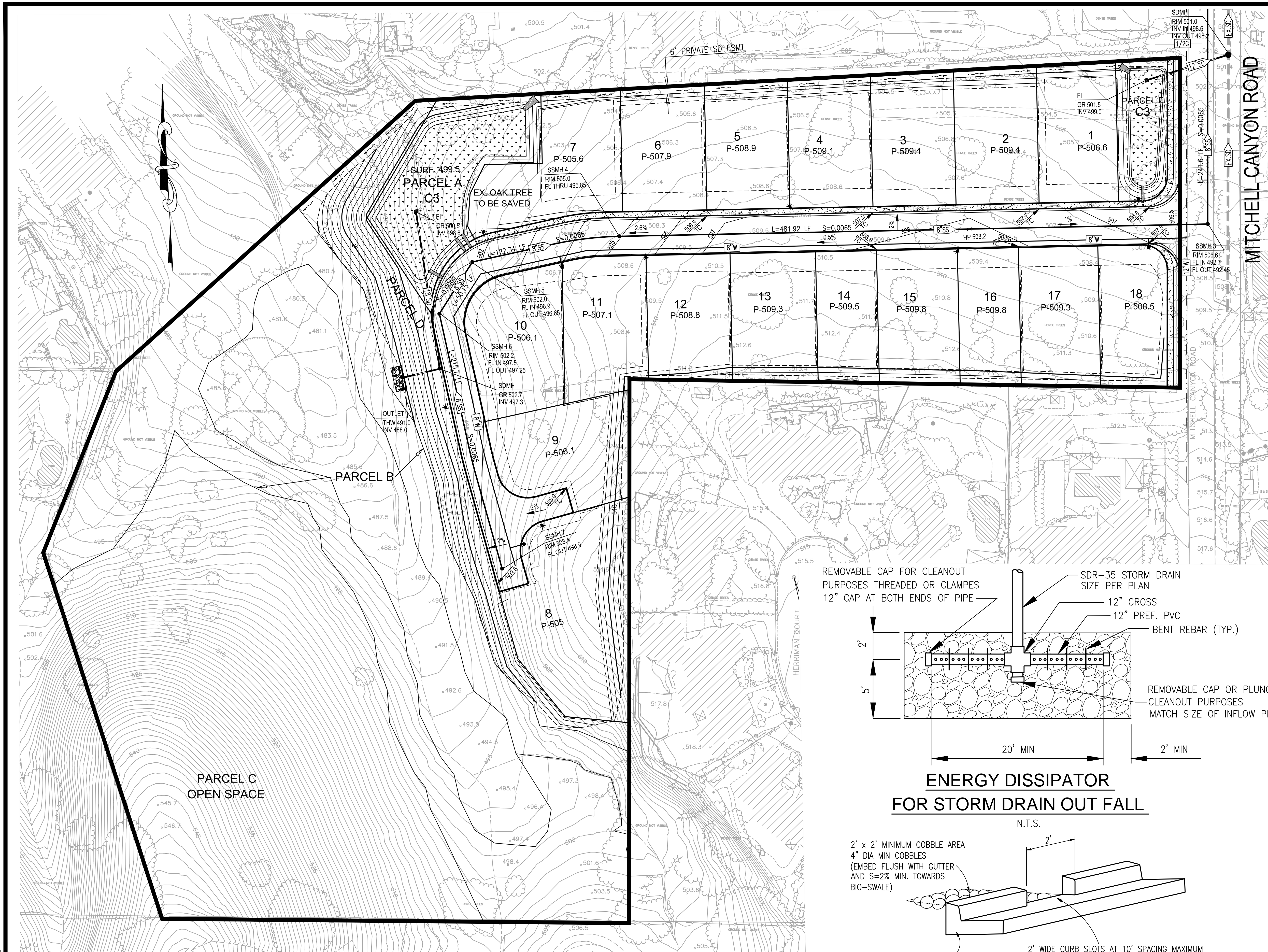
SHEET NO. **C-3**  
OF 6 SHEETS  
JOB NO. 18-16-00

M:\Jobs\18-16-00\TM\C-3 GRADING.dwg Plot Date: 7-22-20

**VESTING TENTATIVE MAP**  
 FOR  
**SUBDIVISION 9536**  
**DIABLO MEADOWS**  
 CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA  
**PRELIMINARY UTILITY PLAN**

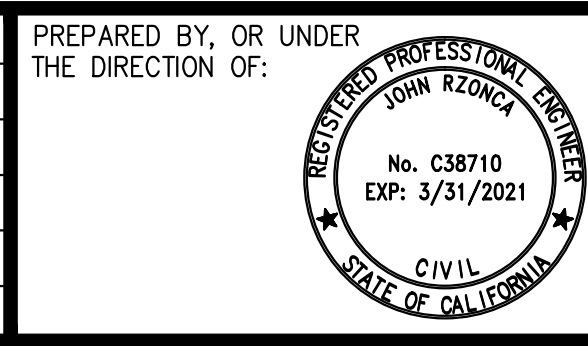
SCALE: AS SHOWN

APRIL, 2020  
 UPDATED: OCTOBER, 2020



**PRELIMINARY UTILITY PLAN**  
 SCALE: 1" = 40'

DATE: MARCH, 2020				
SCALE:				
DRAWN: TJB/YPS				
DESIGNED: HK/TB				
ENGINEER: JR/YYS				
MANAGER: HK				
	NO.	BY	DATE	REVISIONS



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SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS

**PRELIMINARY UTILITY PLAN**

CLAYTON CONTRA COSTA COUNTY CALIFORNIA

SHEET NO. **C-4** OF 6 SHEETS  
 JOB NO. 18-16-00

M:\Jobs\18-16-00\TM\C-4 UTILITY.dwg Plot Date: 10-16-20



# VESTING TENTATIVE MAP FOR SUBDIVISION 9536 DIABLO MEADOWS CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA

## STORMWATER CONTROL PLAN

SCALE: AS SHOWN

APRIL, 2020  
UPDATED: OCTOBER, 2020

### LEGEND

- (A)** DRAINAGE MANAGEMENT AREA (DMA)
- DMA BOUNDARY
- ▒** PAVEMENT
- ▨** ROOFTOPS (INCLUDES WALKS AND PATIOS)
- LANDSCAPE (NO HATCH)
- ⋯** RETENTION AREA (BASIN)

### BASIN SIZING CALCULATIONS

Project Name: Diablo Canyon  
Project Type: Treatment and Flow Control  
APN: 121-090-011 and -016  
Drainage Area: 206,020  
Mean Annual Precipitation: 18.7

### Self-Treating DMAs

DMA Name	Area (sq ft)
DMA C Slope	17,690.0

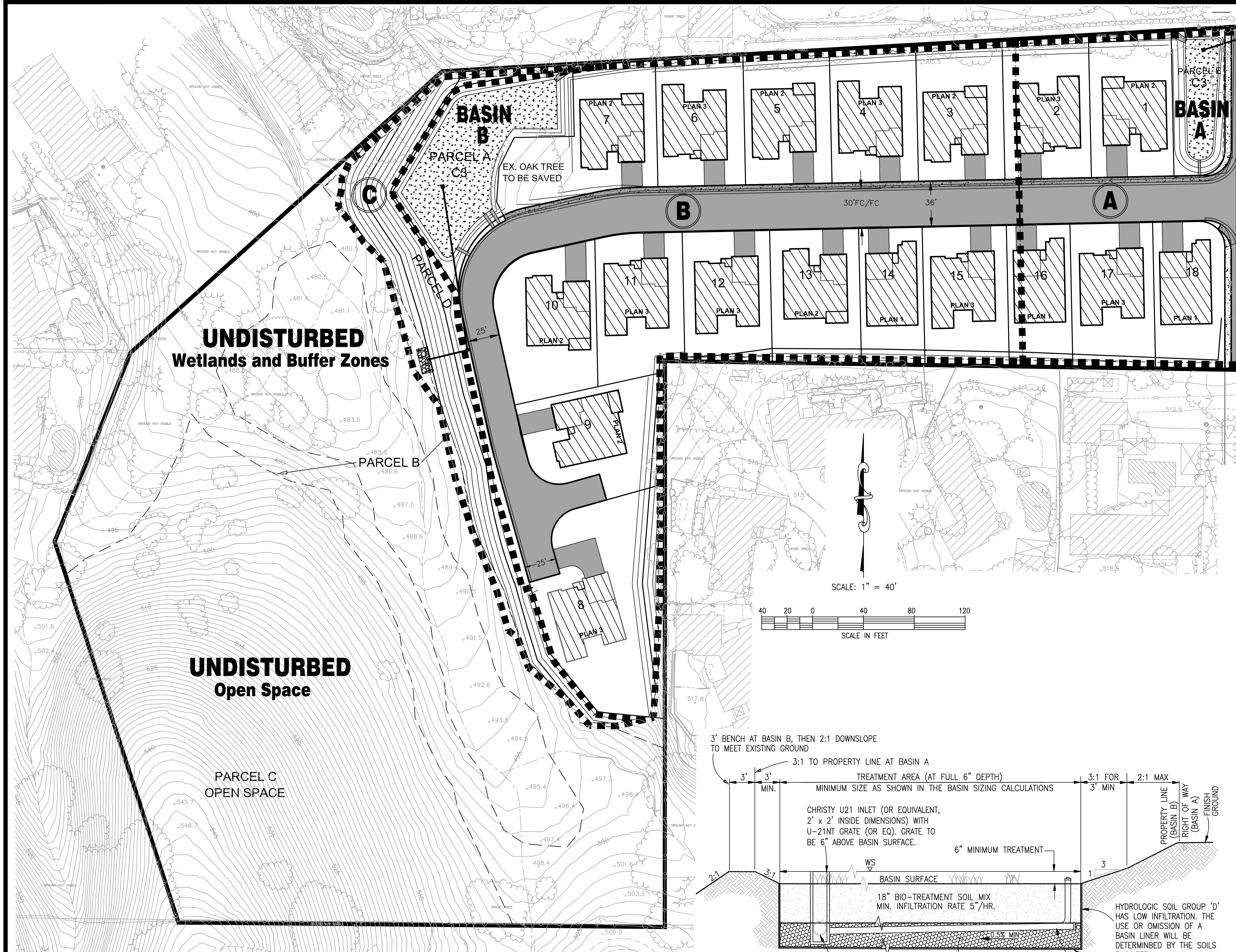
### IV. Areas Draining to IMPs

IMP Name: Basin A  
IMP Type: Bioretention Facility  
Soil Group: Basin A

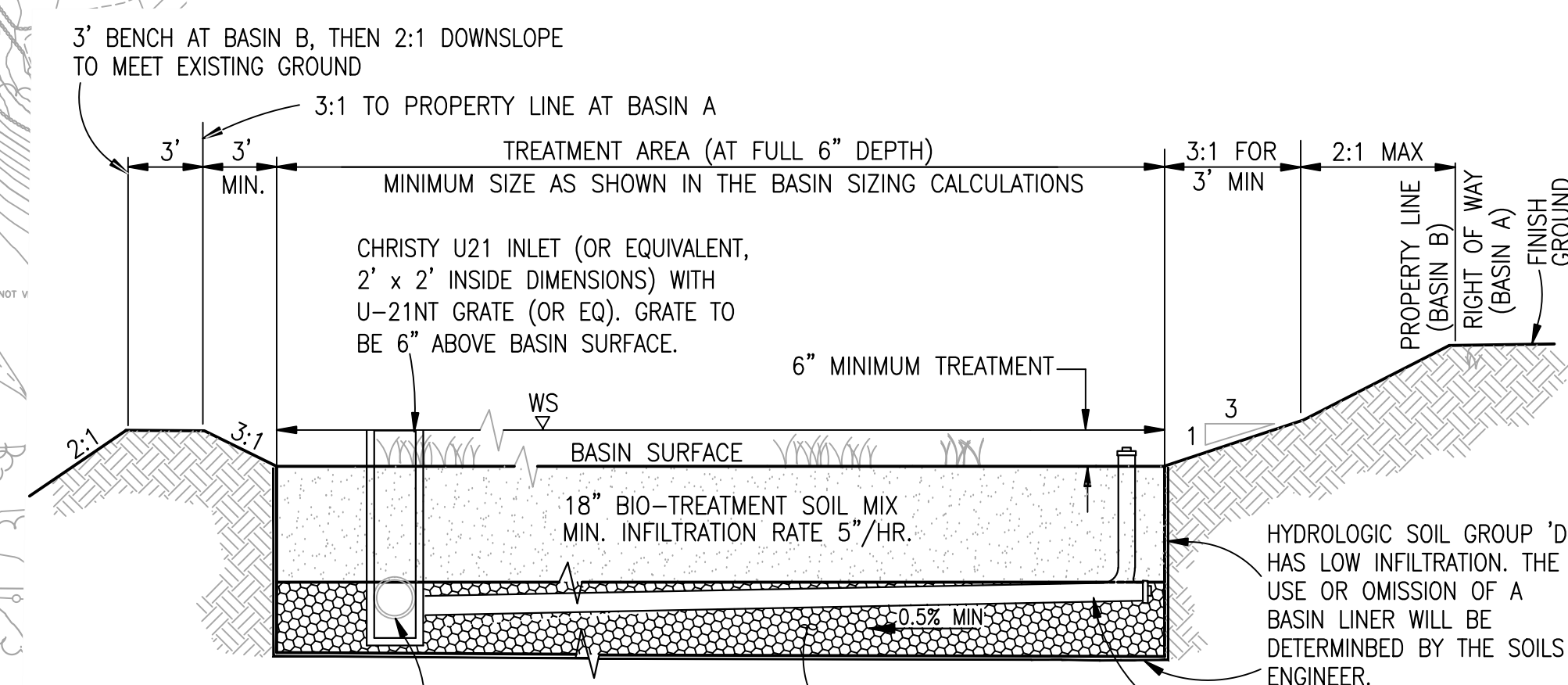
DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
DMA A - Roof	12,730	Conventional Roof	1.00	12,730				
DMA A - Pymt	9,410	Concrete or Asphalt	1.00	9,410				
DMA A - Ldscp	21,230	Landscape	0.70	14,861				
<b>Total</b>				<b>37,001</b>				
		<b>Area</b>	0.050	1,066	1,972	1,980		
		<b>Surface Volume</b>	0.042	1,066	1,657	1,660		
		<b>Subsurface Volume</b>	0.055	1,066	2,169	2,180		
		<b>Maximum Underdrain Flow (cfs) Orifice Diameter (in)</b>					0.07	1.73

IMP Name: Basin B  
IMP Type: Bioretention Facility  
Soil Group: Basin B

DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
DMA B - Roof	33,610	Conventional Roof	1.00	33,610				
DMA B - Pymt	26,710	Concrete or Asphalt	1.00	26,710				
DMA B - Ldscp	74,770	Landscape	0.70	52,339				
<b>Total</b>				<b>112,659</b>				
		<b>Area</b>	0.050	1,066	6,005	7,870		
		<b>Surface Volume</b>	0.042	1,066	5,044	5,050		
		<b>Subsurface Volume</b>	0.055	1,066	6,605	6,620		
		<b>Maximum Underdrain Flow (cfs) Orifice Diameter (in)</b>					0.23	3.06



PLAN VIEW  
SCALE: 1" = 40'



BIORETENTION BASIN - TYPICAL SECTION  
NOT TO SCALE

### SWCP FIGURE A

DATE: MARCH, 2020			
SCALE:			
DRAWN: TJB/YPS			
DESIGNED: HK/TB			
ENGINEER: JR/YYS			
MANAGER: HK			
NO.	BY	DATE	REVISIONS

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SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS  
**PRELIMINARY STORMWATER CONTROL PLAN**  
CLAYTON CONTRA COSTA COUNTY CALIFORNIA

SHEET NO.  
**C-6**  
OF 6 SHEETS  
JOB NO. 18-16-00

M:\Jobs\18-16-00\TM C-6 SWCP.dwg Plot Date: 10-15-20

# DIABLO MEADOWS

## CLAYTON, CALIFORNIA



PLAN 1D - TUSCAN

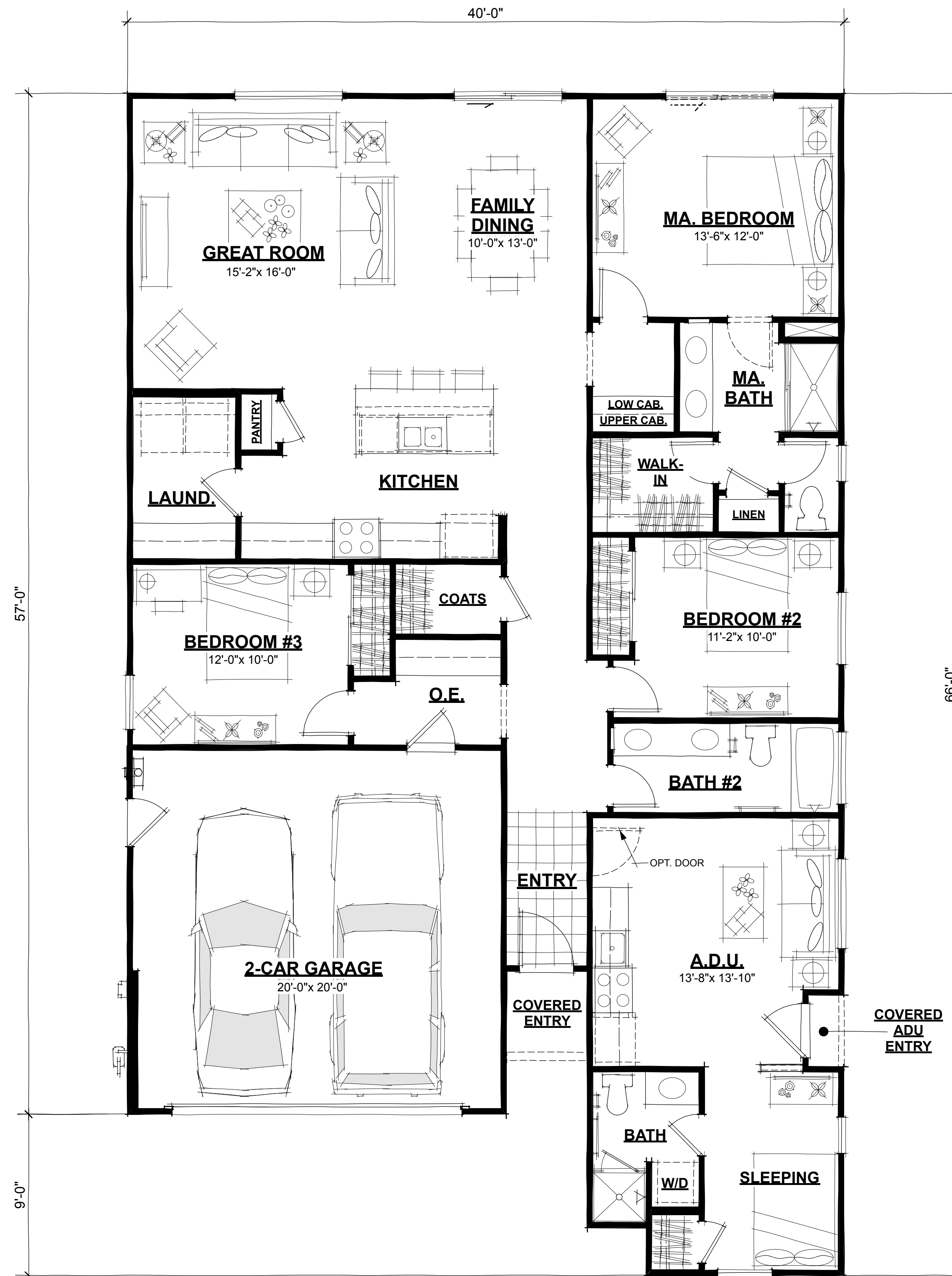
PLAN 2xB - CRAFTSMAN

PLAN 2C - FARMHOUSE

PLAN 3A - SPANISH

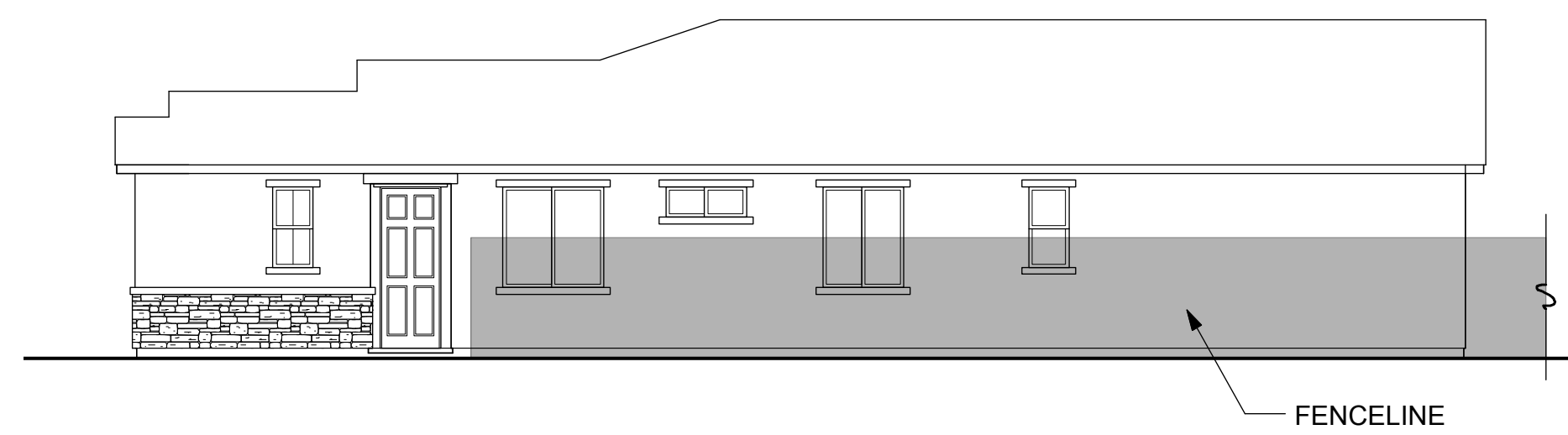
### SHEET INDEX

T-1	COVER SHEET	A-8	PLAN 2X - SECOND FLOOR PLAN
A-1	PLAN 1 - FLOOR PLAN	A-9	PLAN 2X - ELEVATION 'A' (SPANISH)
A-2	PLAN 1 - ELEVATION 'D' (TUSCAN)	A-10	PLAN 2X - ELEVATION 'B' (CRAFTSMAN)
A-3	PLAN 2 - FLOOR PLAN	A-11	PLAN 2X - ELEVATION 'C' (FARMHOUSE)
A-4	PLAN 2 - ELEVATION 'A' (SPANISH)	A-12	PLAN 3 - FLOOR PLAN
A-5	PLAN 2 - ELEVATION 'B' (CRAFTSMAN)	A-13	PLAN 4 - ELEVATION 'A' (SPANISH)
A-6	PLAN 2 - ELEVATION 'C' (FARMHOUSE)	A-14	PLAN 4 - ELEVATION 'B' (CRAFTSMAN)
A-7	PLAN 2X - FLOOR PLAN	A-15	PLAN 4 - ELEVATION 'C' (FARMHOUSE)

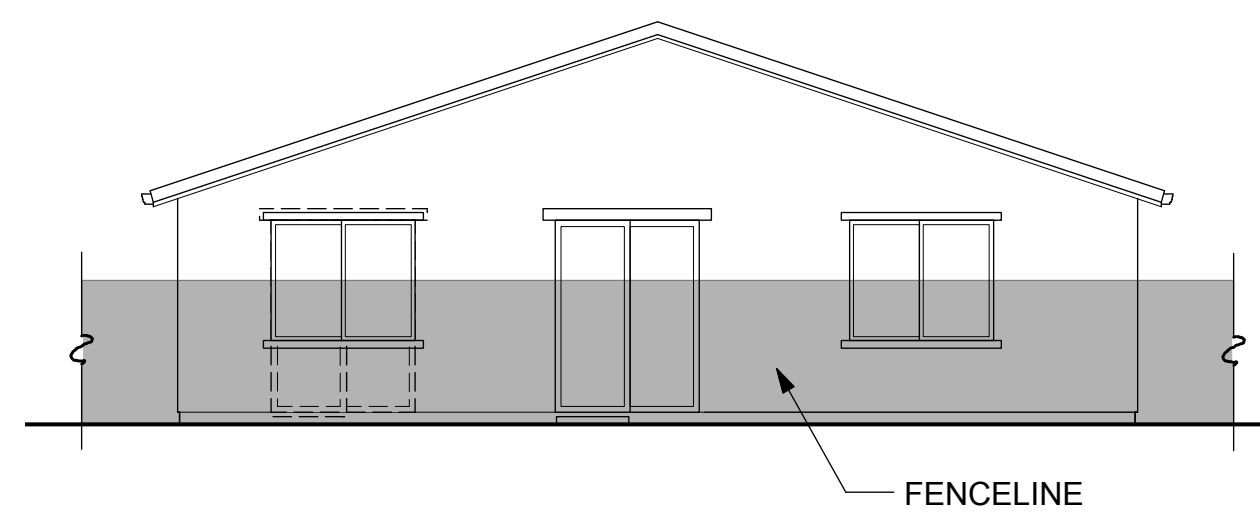


**FLOOR PLAN (1580 S.F.)**  
**ACCESSORY DWELLING UNIT (347 S.F.)**

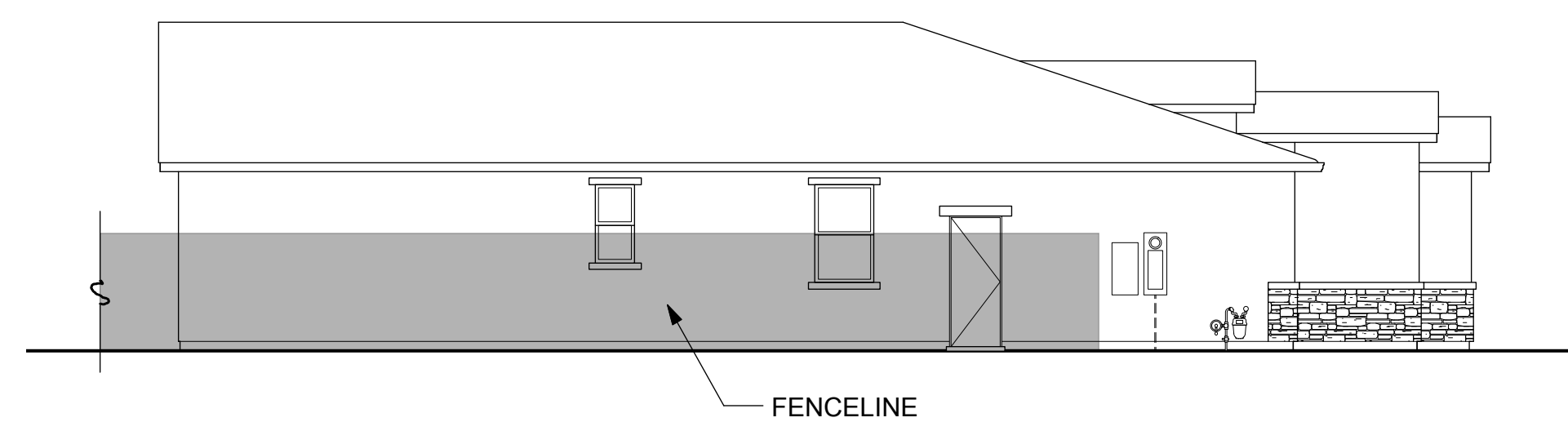
**PLAN 1 (140-1927)**  
**DIABLO MEADOWS**  
**Clayton, California**



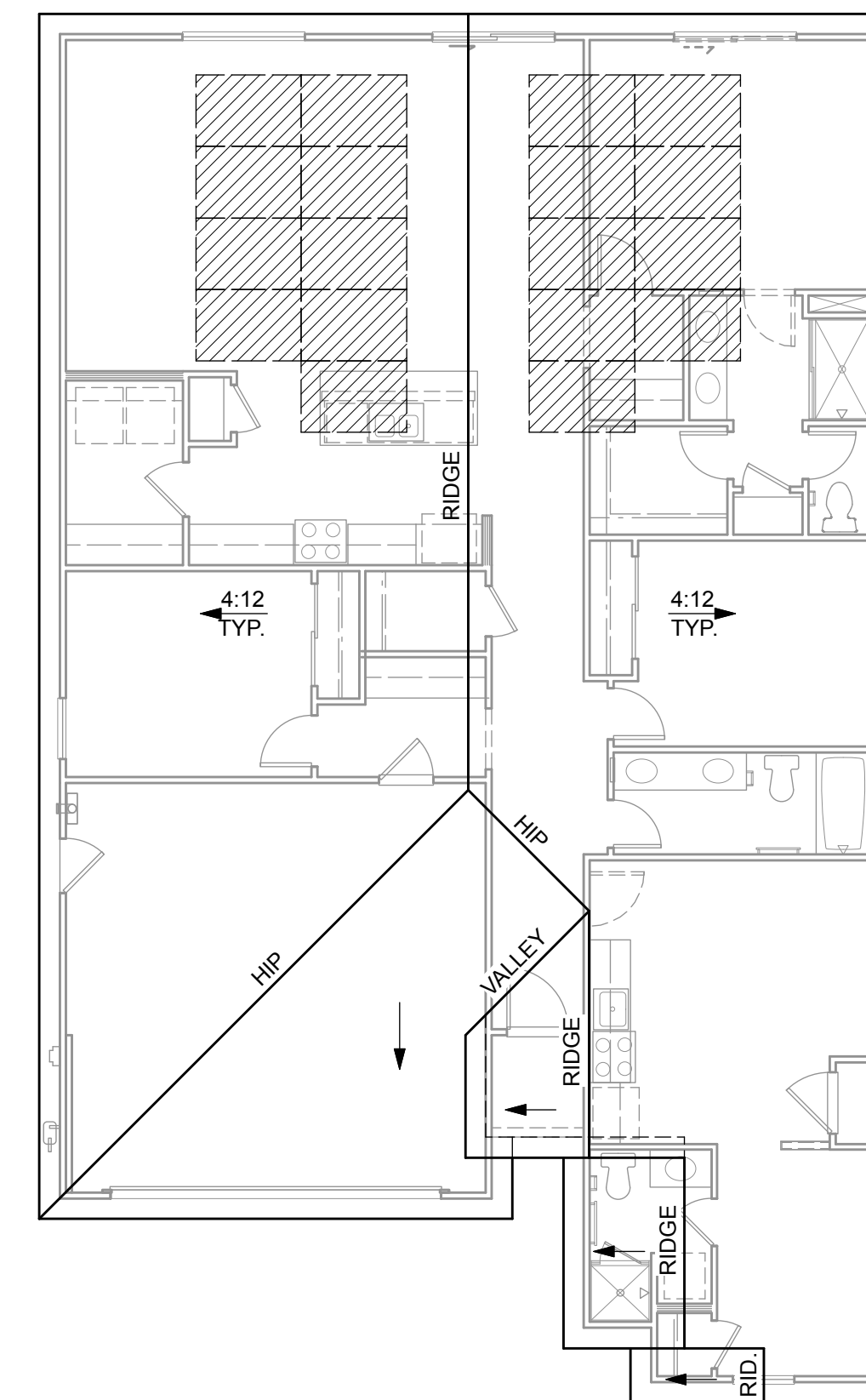
**RIGHT SIDE "A"**



**REAR "A"**



**LEFT SIDE "A"**

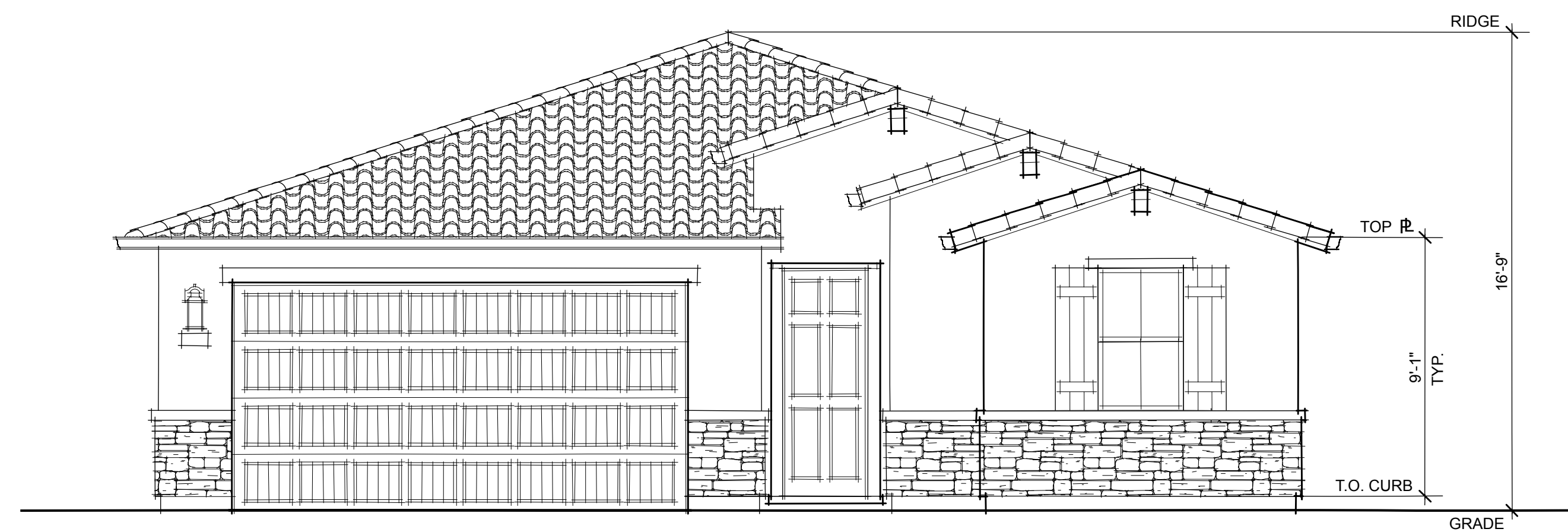


**ROOF PLAN "A"**

**TUSCAN**

- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- DECORATIVE FOAM OUTLOOKERS
- PLANK AND BATTEN SHUTTERS
- CULTURED STONE VENEER
- THEME SPECIFIC GARAGE DOOR
- PROFILE TILE GUTTER
- CONCRETE TILE ROOFING - LOW PROFILE "S"

 INDICATES RECESS



**FRONT ELEVATION "A"  
(TUSCAN)**

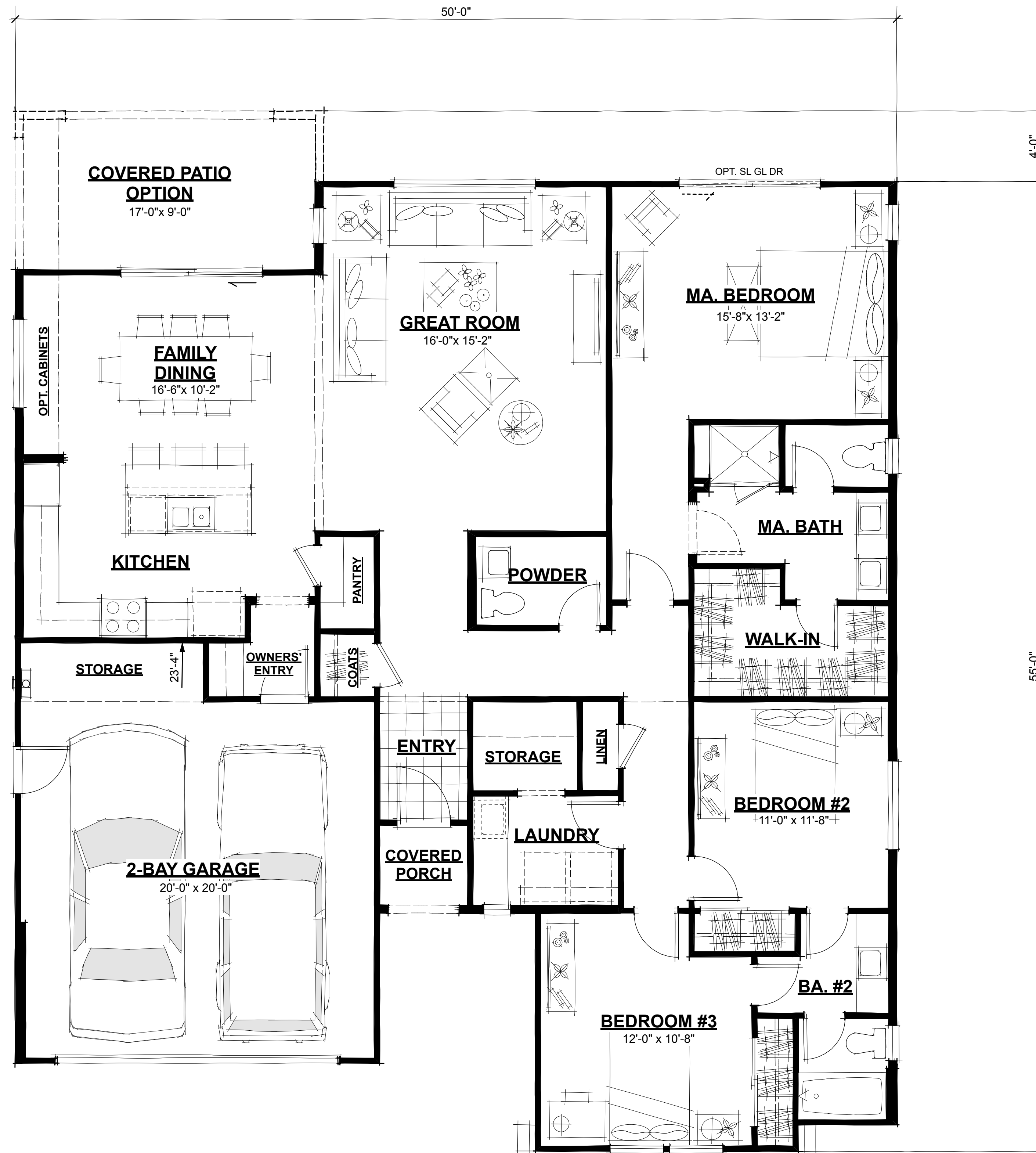
**PLAN 1  
DIABLO MEADOWS  
Clayton, California**

940 Tyler Street #19  
Benicia, CA 94510  
Phone: (707) 746-6586



2005 4-22-20

**SHEET A-2**



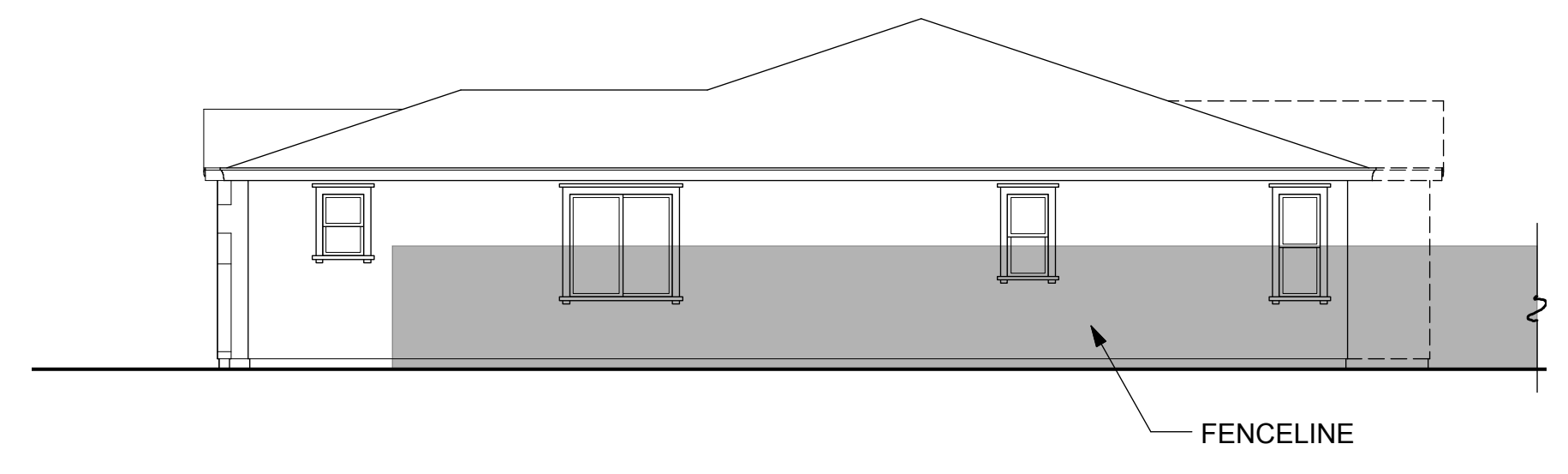
FLOOR PLAN (1952 S.F.)



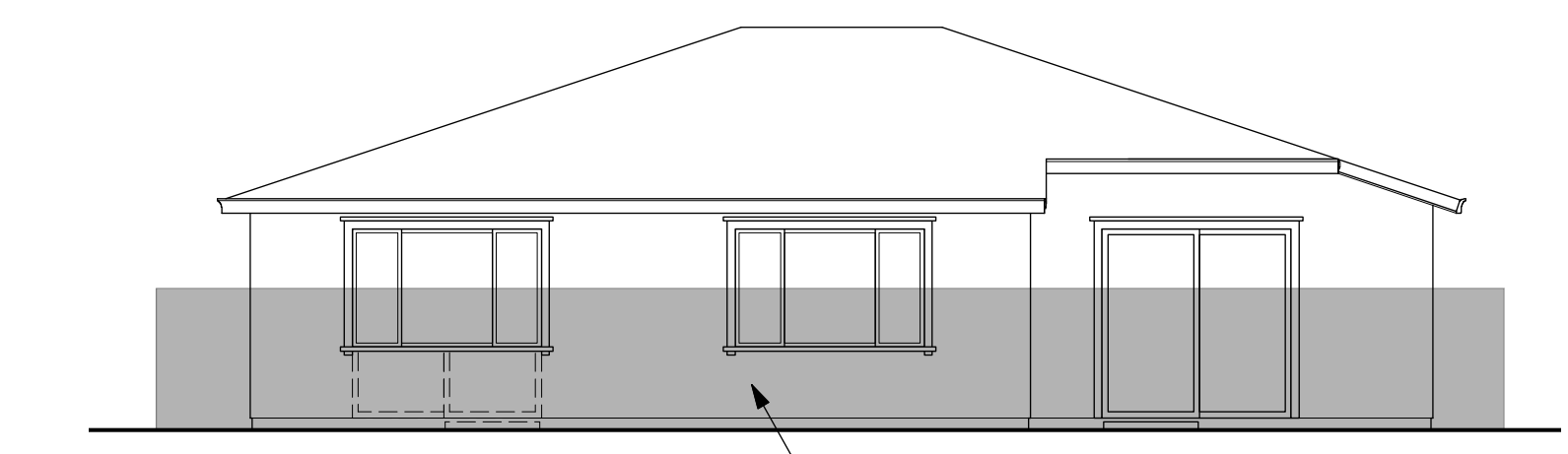
**SPANISH**

- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- STUCCO OVER SHAPED FOAM CORBELS
- DECORATIVE TILE PIPE VENTS
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - LOW PROFILE "S"

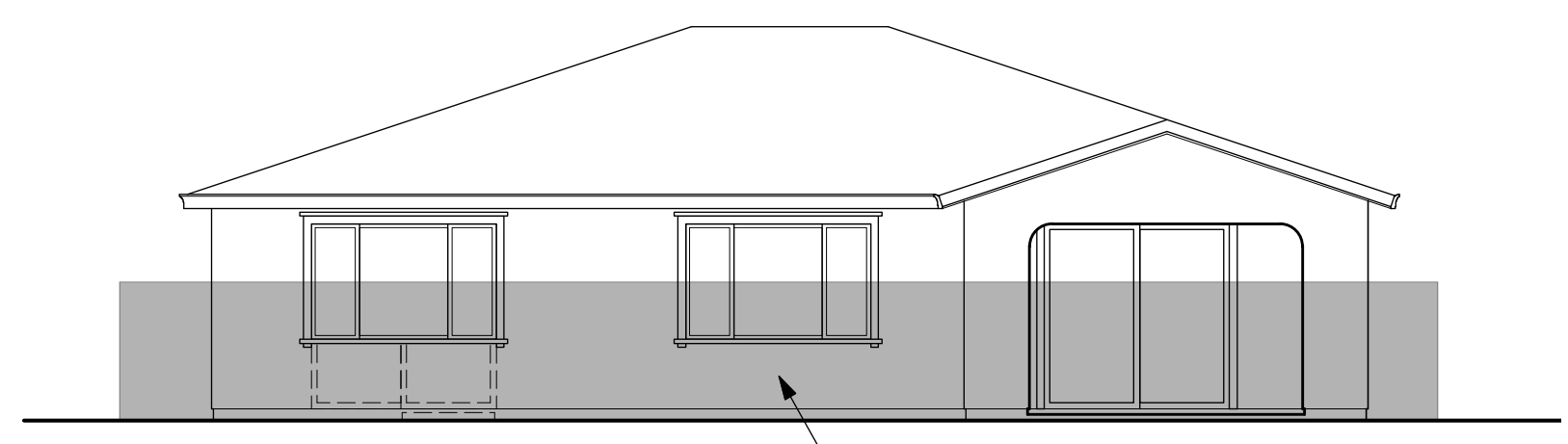
INDICATES RECESS



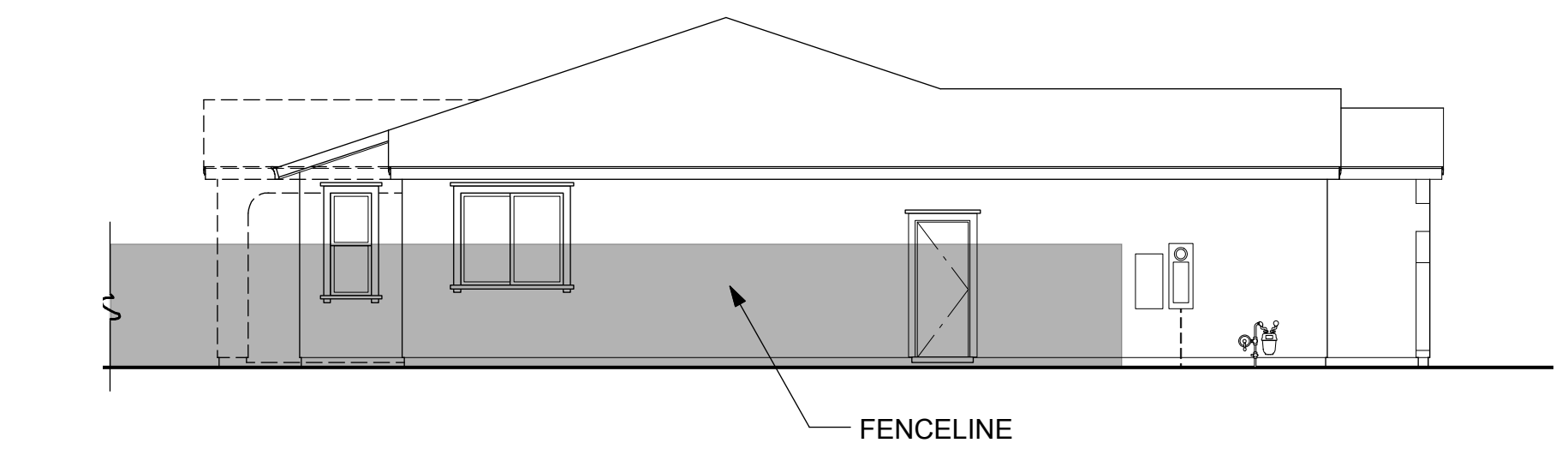
**RIGHT SIDE "A"**



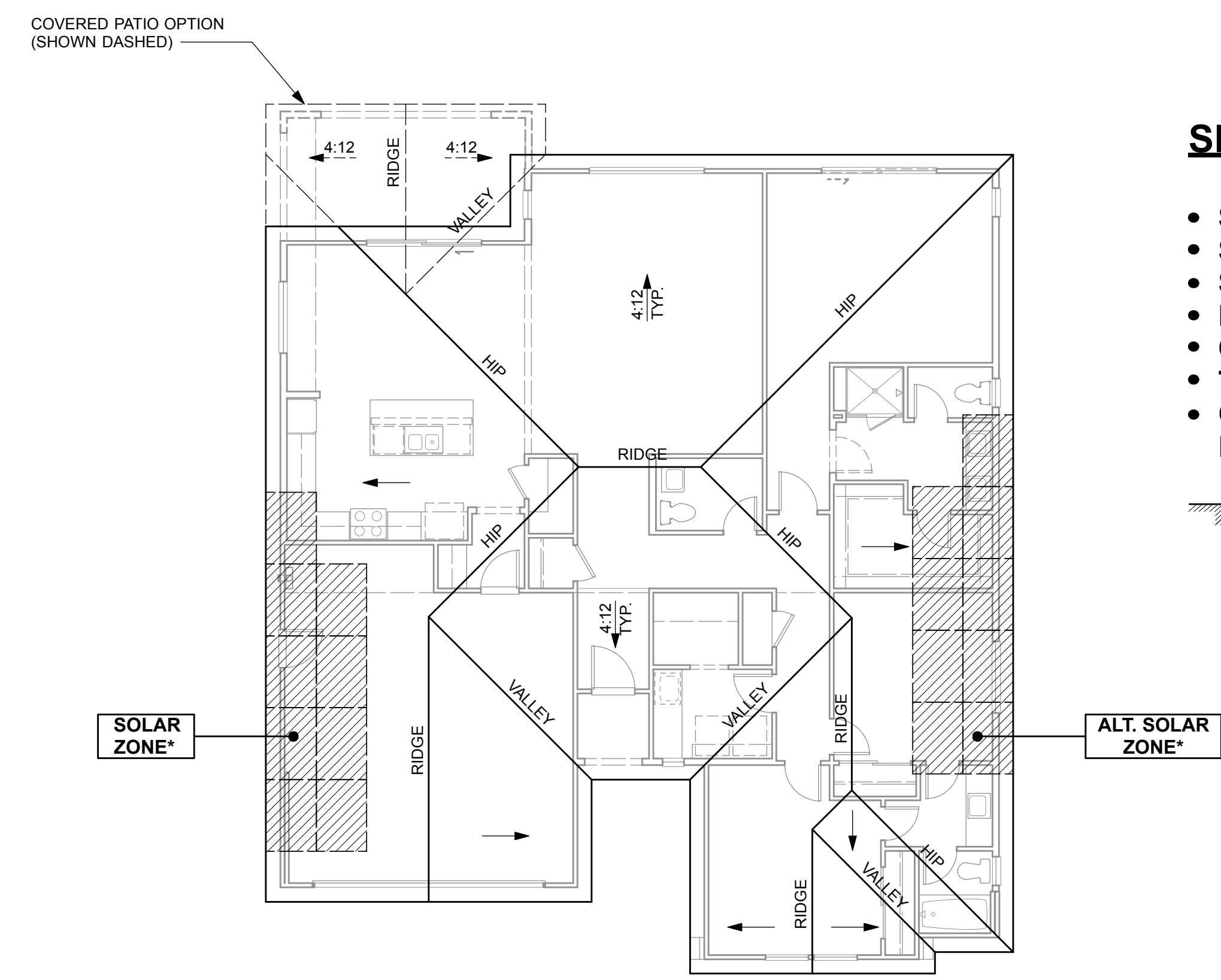
**REAR "A"**



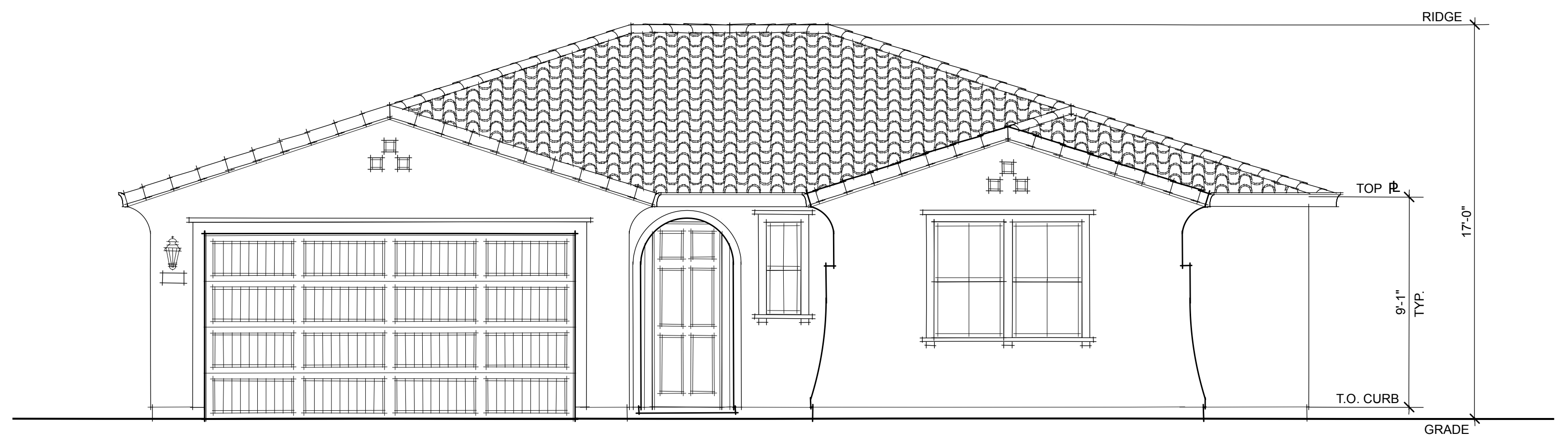
**REAR "A"  
(COVERED PATIO OPTION)**



**LEFT SIDE "A"**



**ROOF PLAN "A"**



**FRONT ELEVATION "A"  
(SPANISH)**

**PLAN 2  
DIABLO MEADOWS  
Clayton, California**

940 Tyler Street #19  
Benicia, CA 94510  
Phone: (707) 746-6586

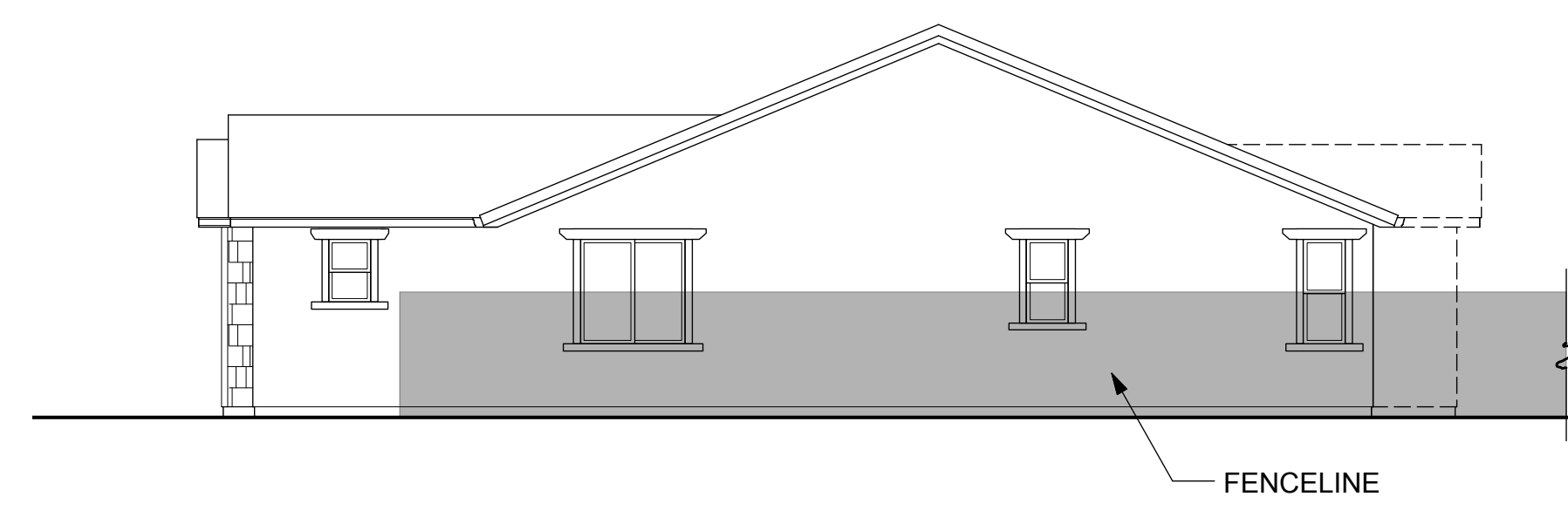


**SHEET A-4**

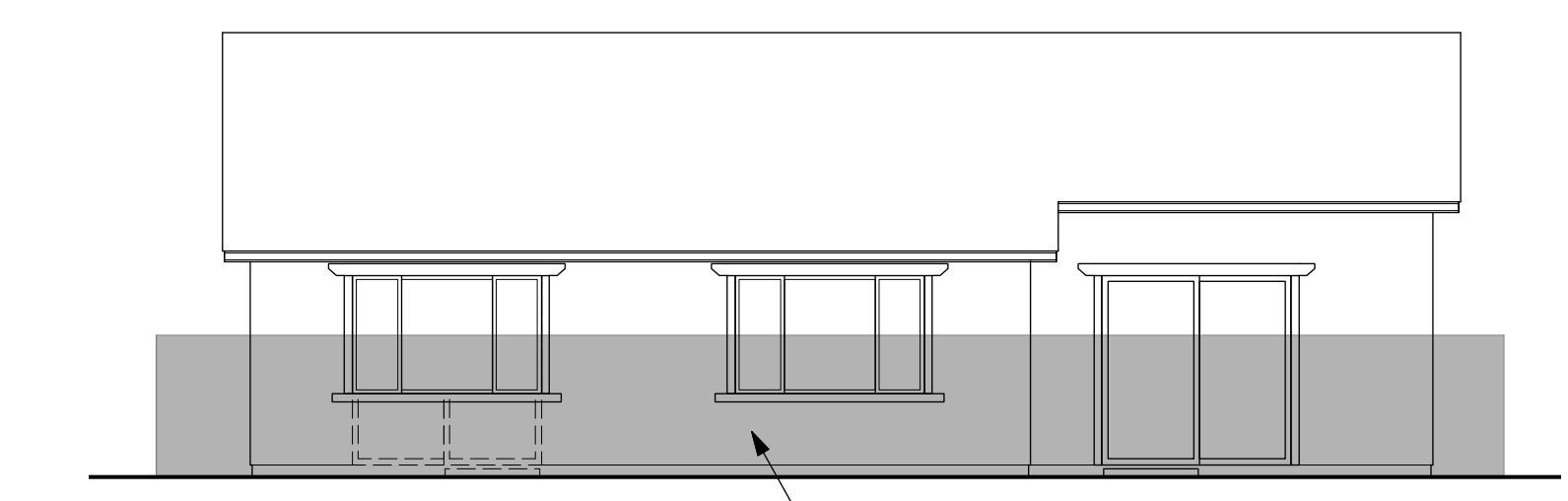
2005 4-22-20

**CRAFTSMAN**

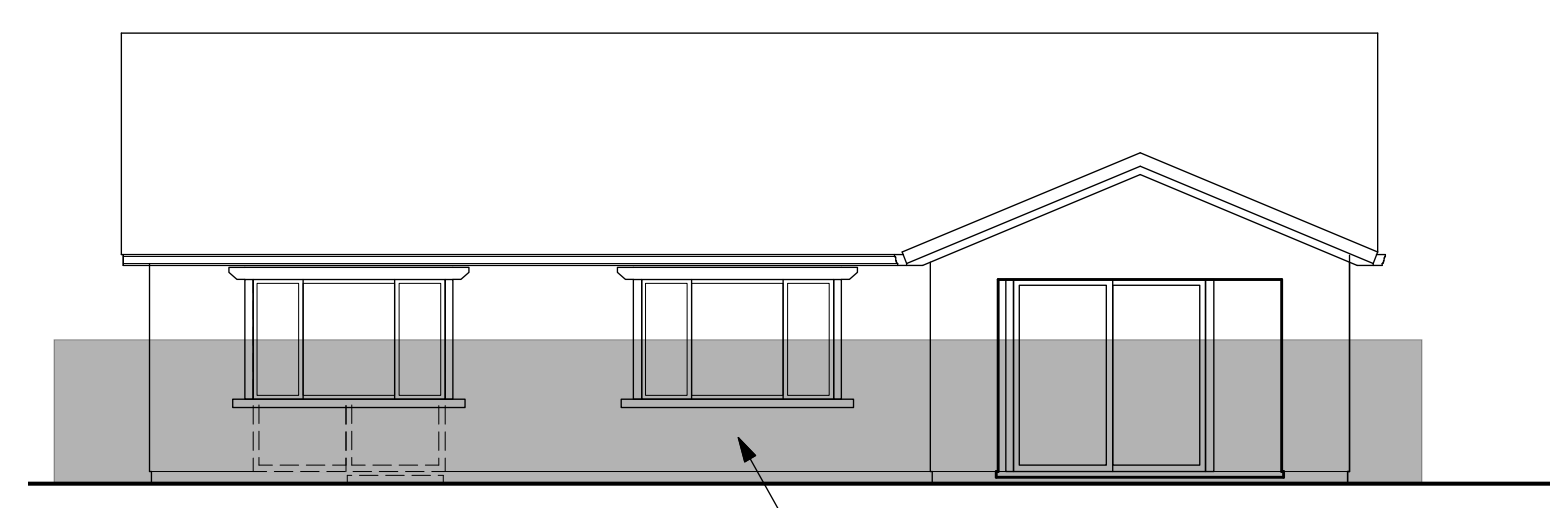
- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- WOOD TRIM OVER WOOD SIDING
- FIBER CEMENT SHINGLE SIDING (WHERE SHOWN)
- SHAPED WOOD OUTLOOKERS AT WOOD SIDING
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - "SHAKE" PROFILE



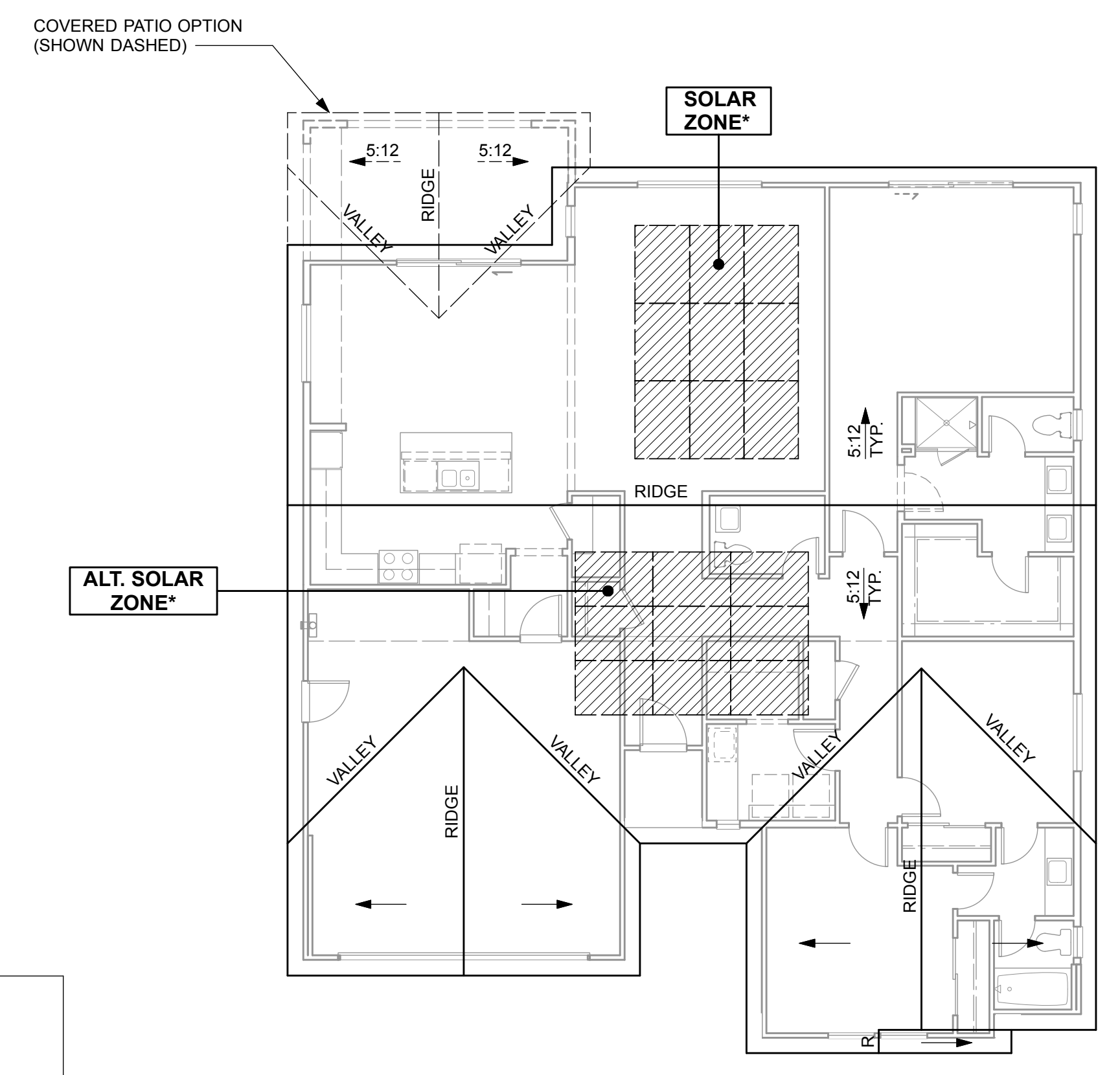
**RIGHT SIDE "B"**



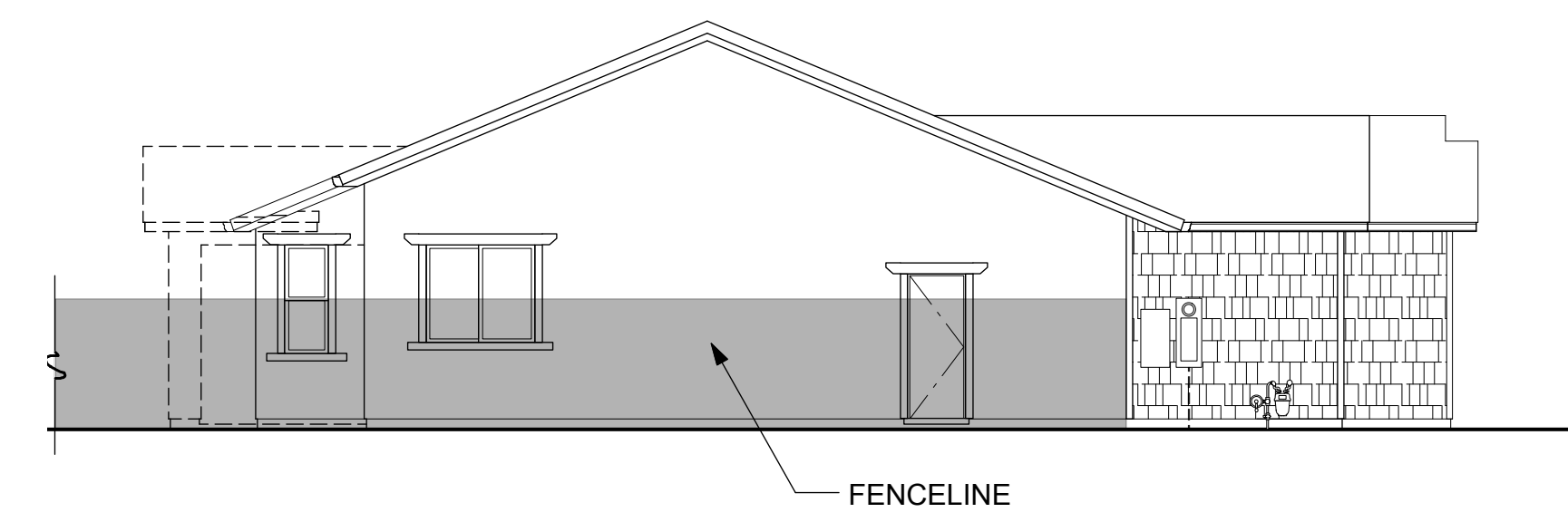
**REAR "B"**



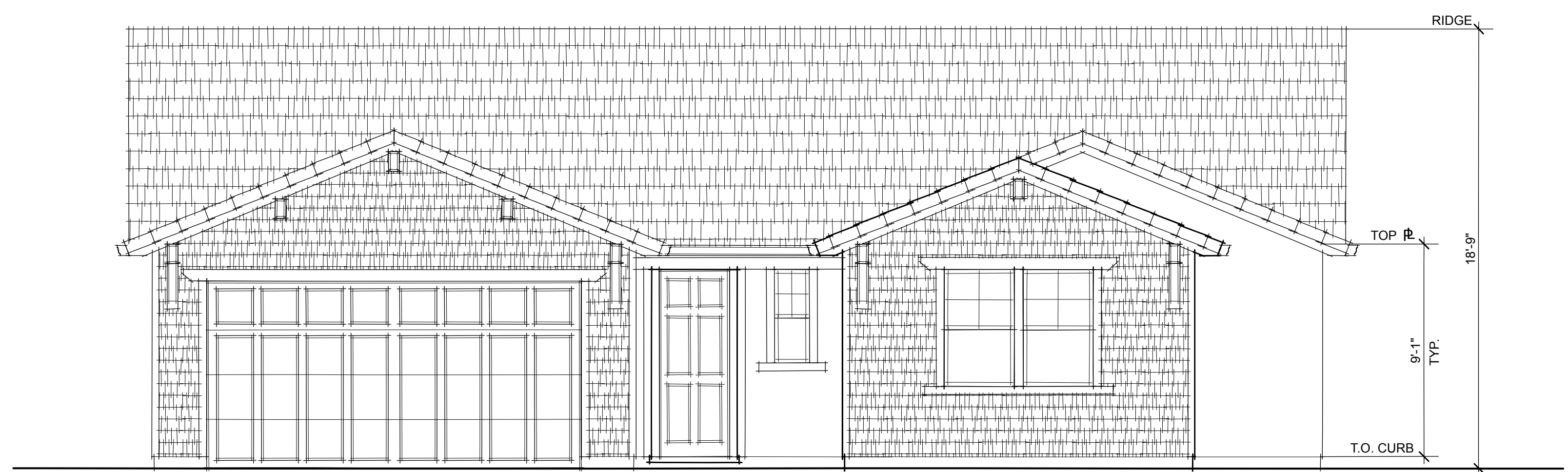
**REAR "B"  
(COVERED PATIO OPTION)**



**ROOF PLAN "B"**



**LEFT SIDE "B"**



**FRONT ELEVATION "B"  
(CRAFTSMAN)**

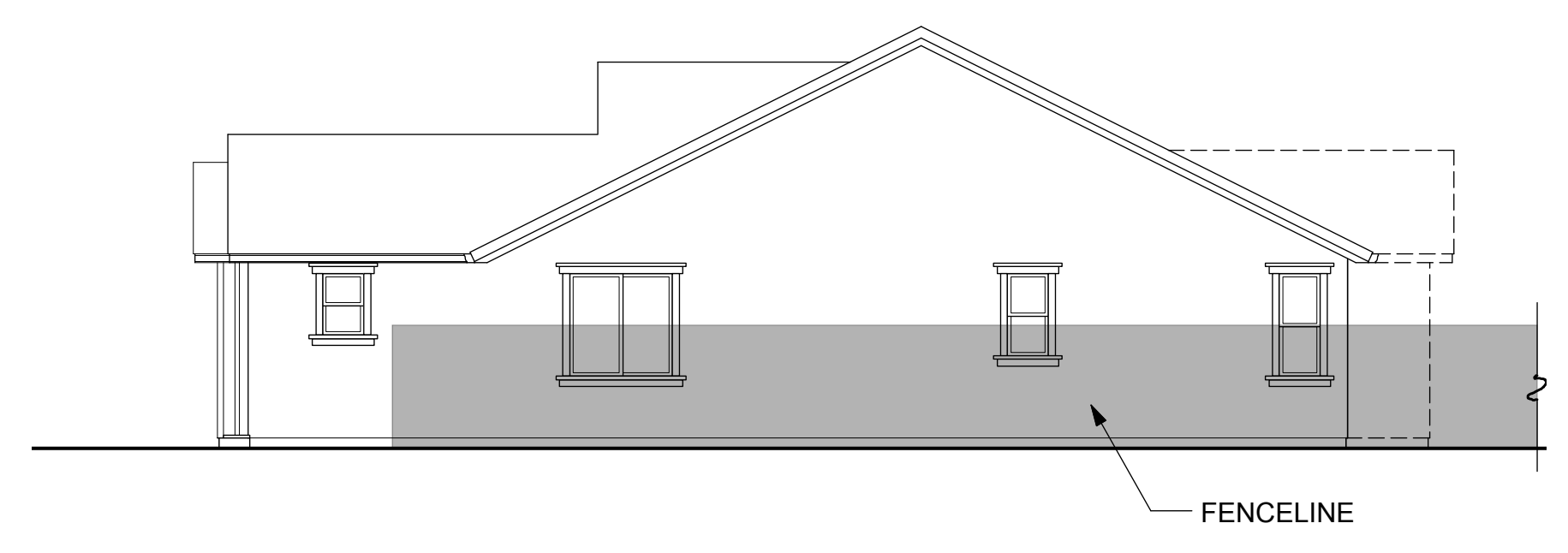
**PLAN 2  
DIABLO MEADOWS  
Clayton, California**

940 Tyler Street #19  
Benicia, CA 94510  
Phone: (707) 746-6586

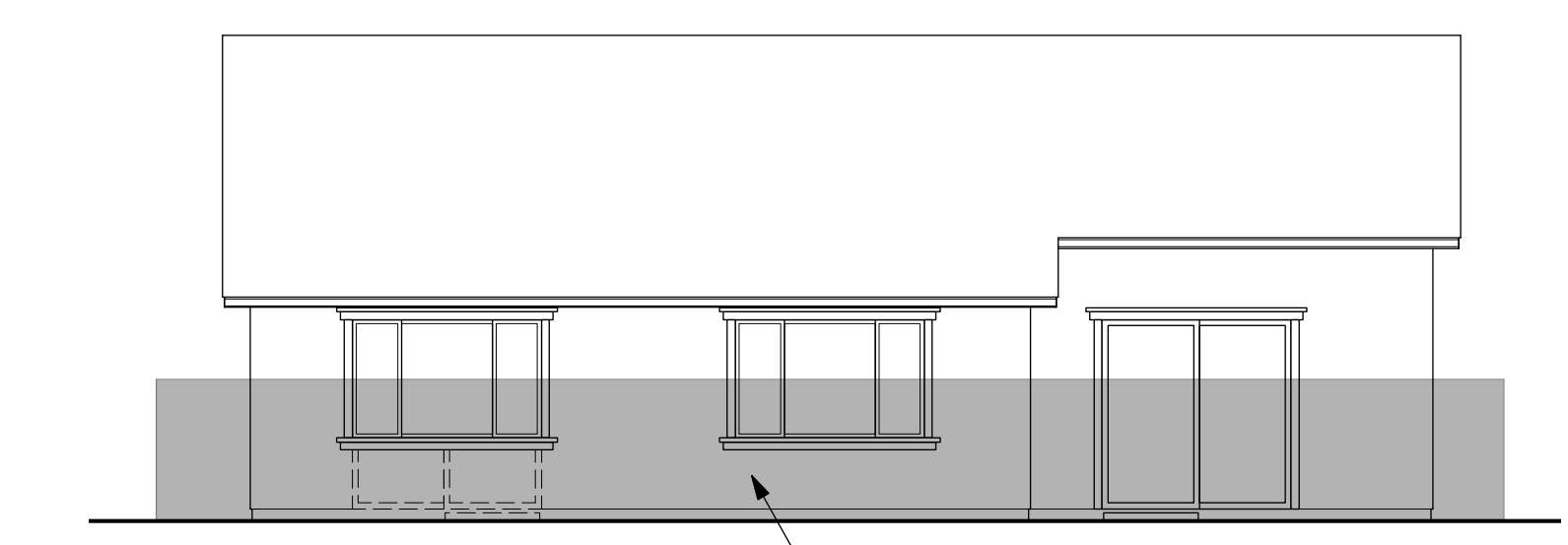


**FARMHOUSE**

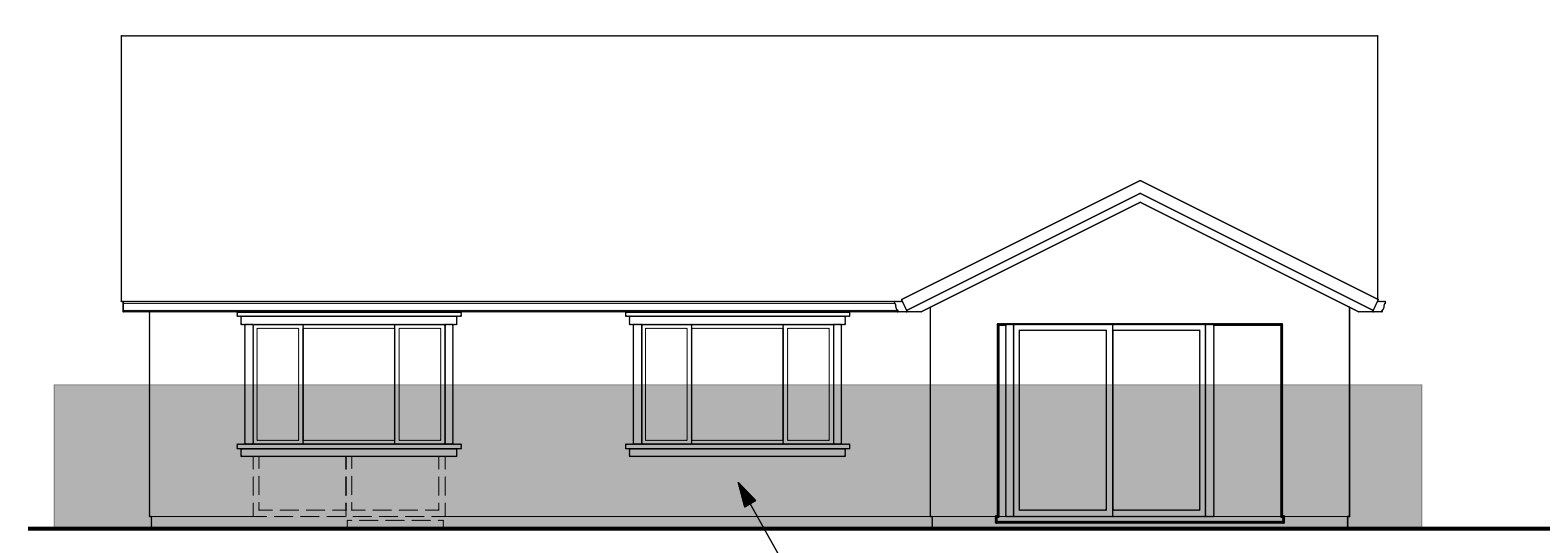
- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- WOOD TRIM OVER WOOD SIDING
- FIBER CEMENT BOARD AND BATTEN SIDING (WHERE SHOWN)
- WOOD GRAIN FOAM (PLANK AND BATTEN) SHUTTERS
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - "SLATE" PROFILE



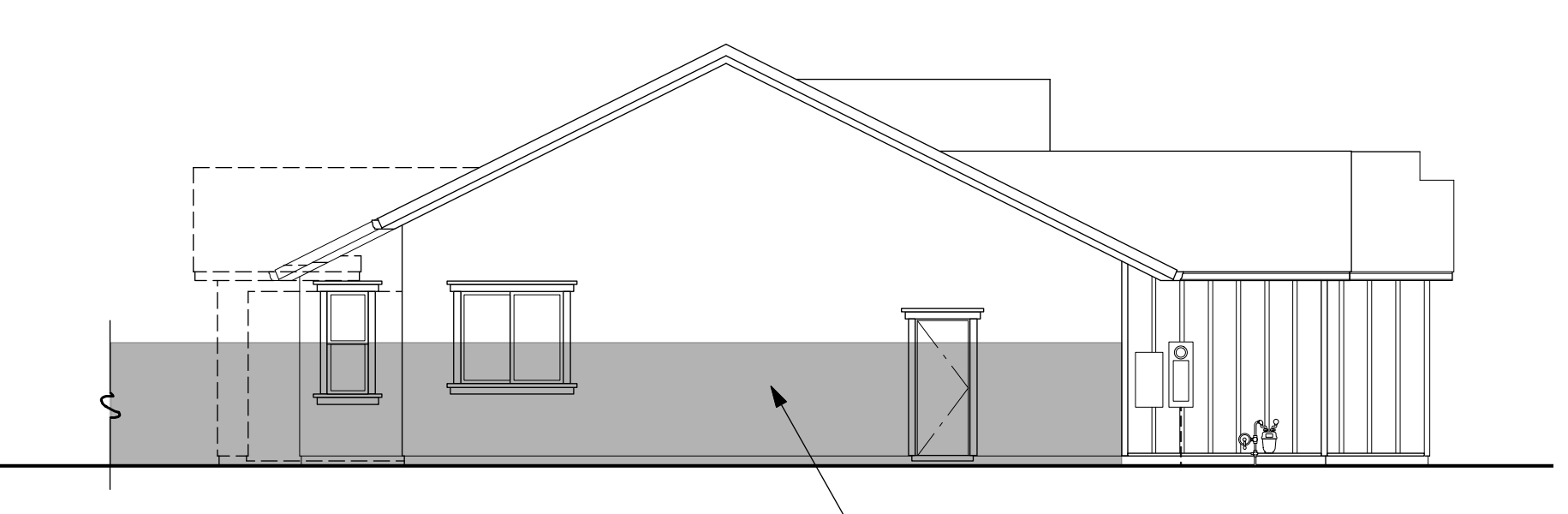
**RIGHT SIDE "C"**



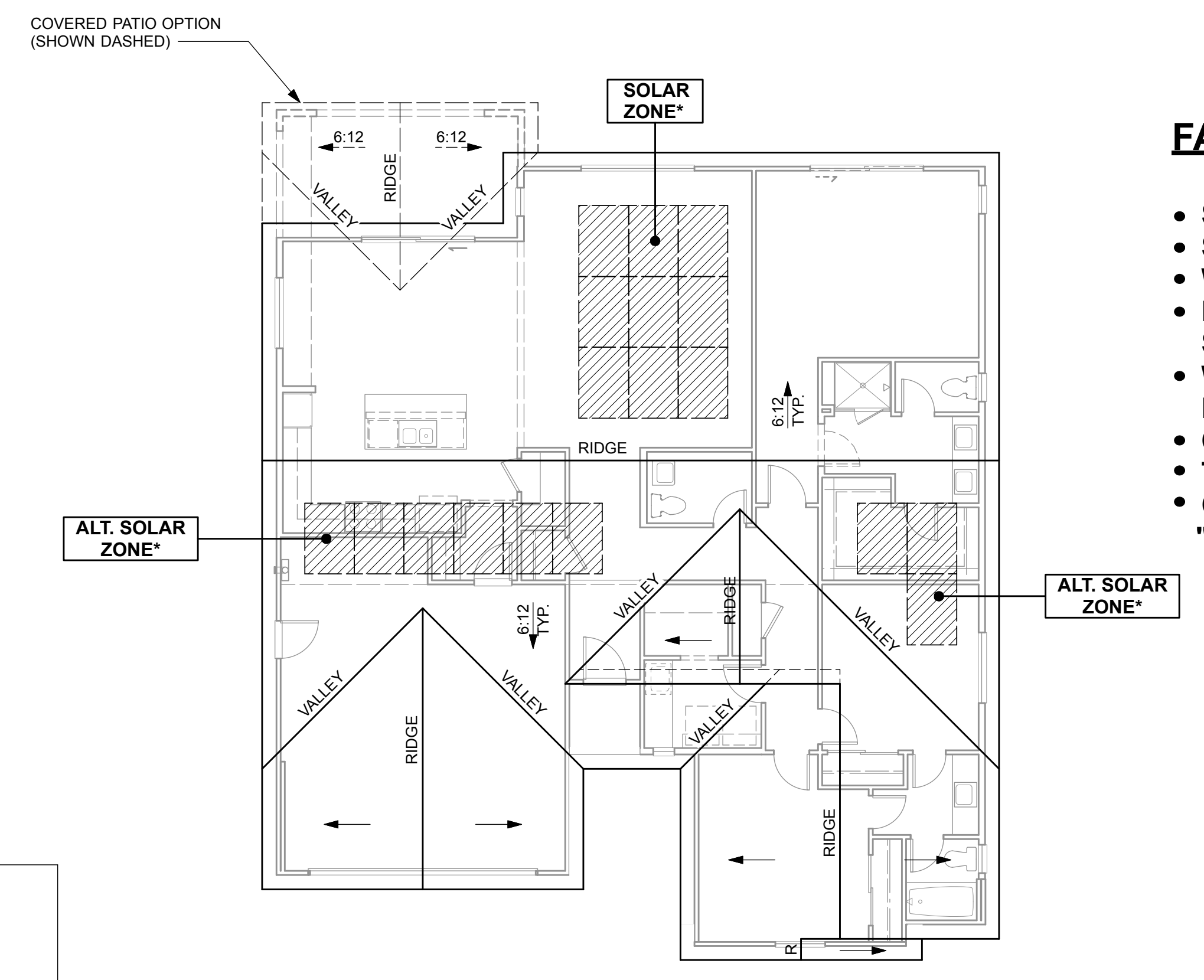
**REAR "C"**



**REAR "C"  
(COVERED PATIO OPTION)**



**LEFT SIDE "C"**



**ROOF PLAN "C"**

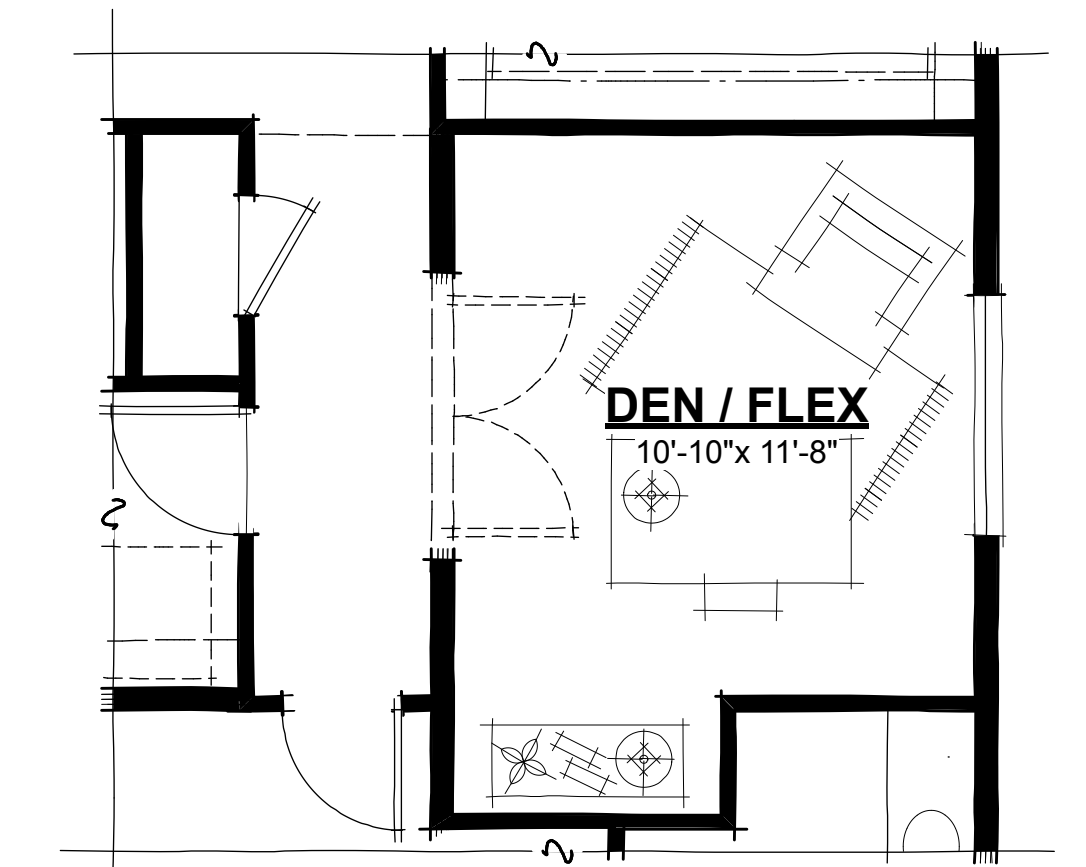
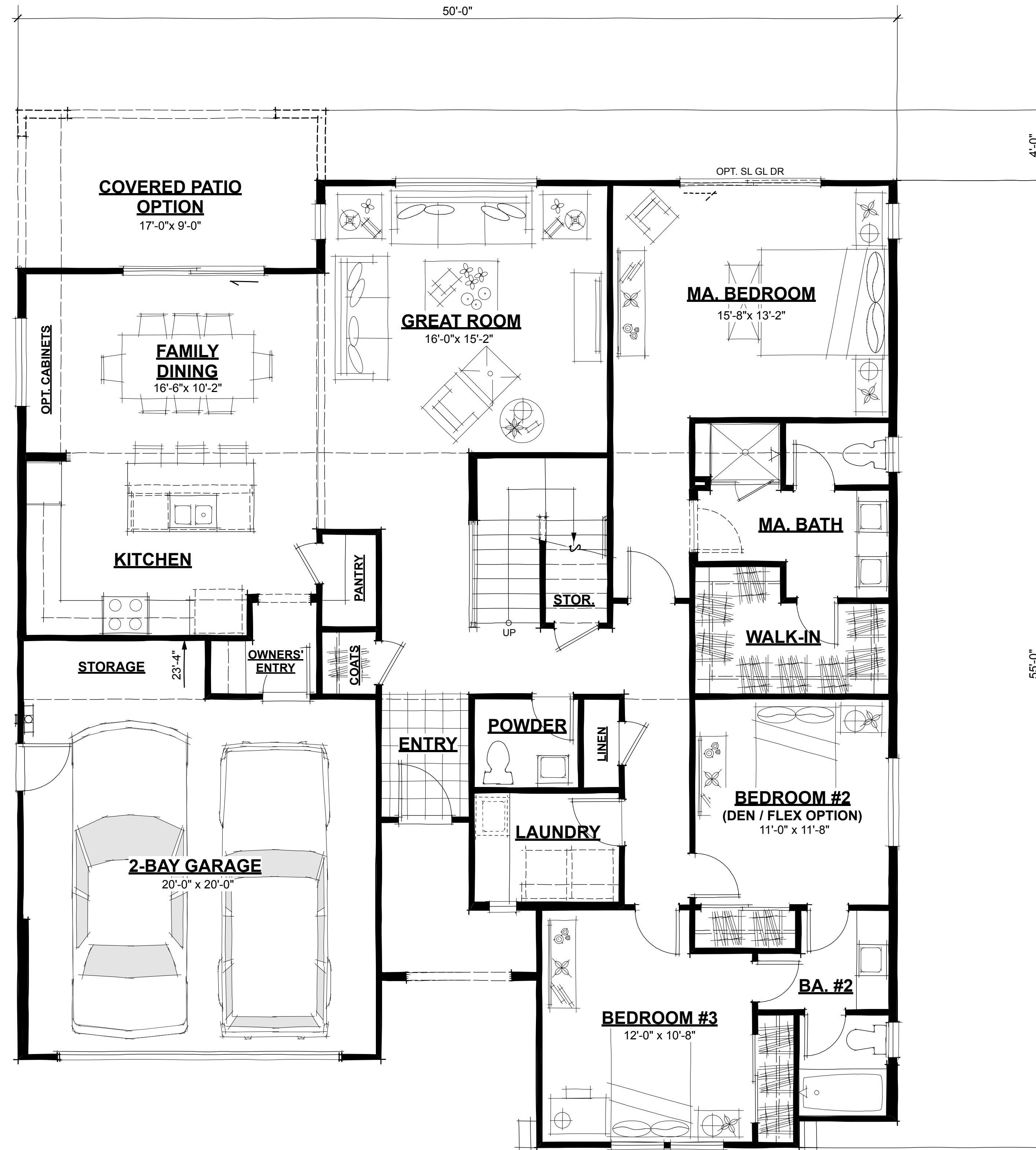


**FRONT ELEVATION "C"  
(FARMHOUSE)**

**PLAN 2  
DIABLO MEADOWS  
Clayton, California**

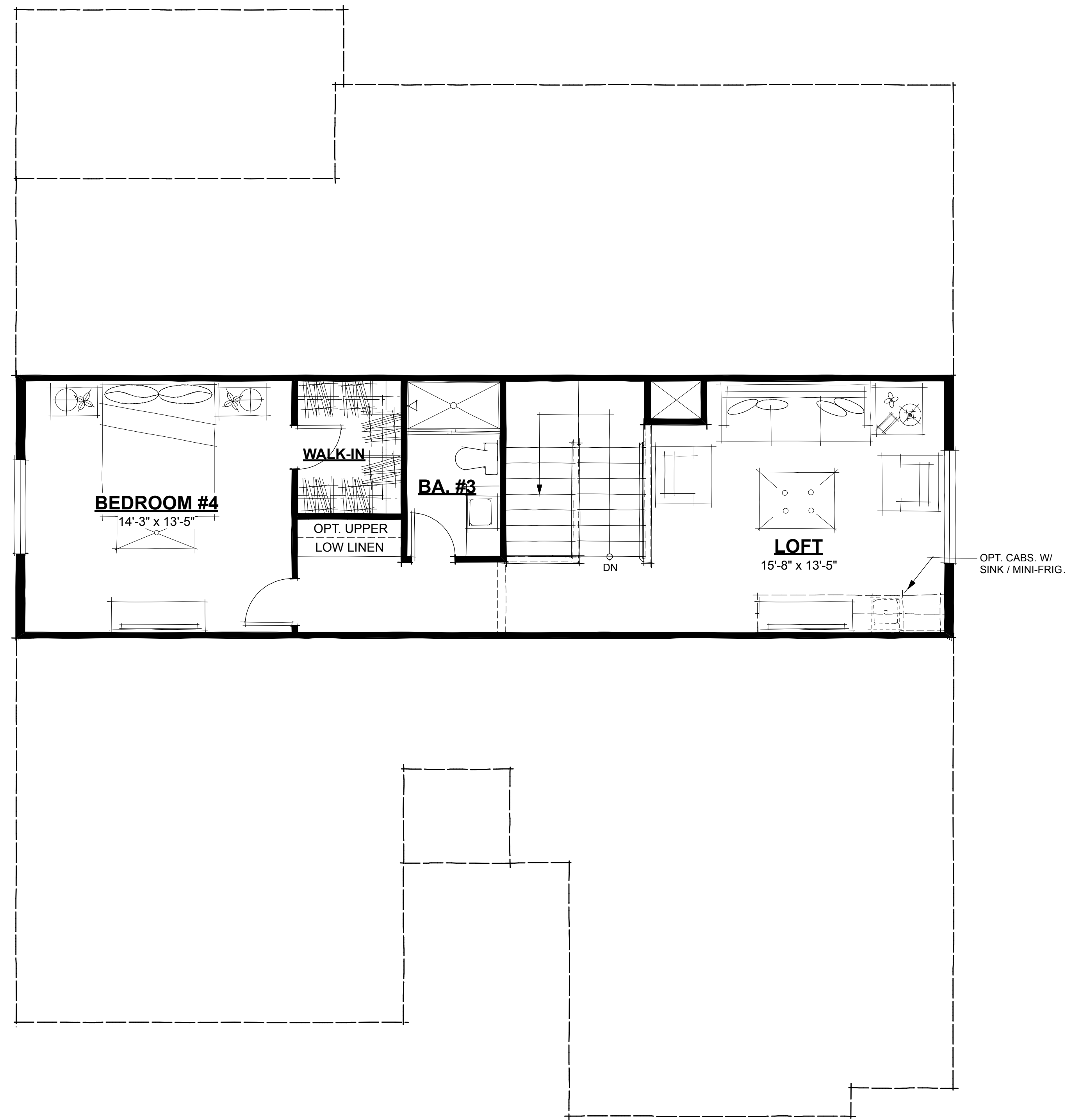
940 Tyler Street #19  
Benicia, CA 94510  
Phone: (707) 746-6586





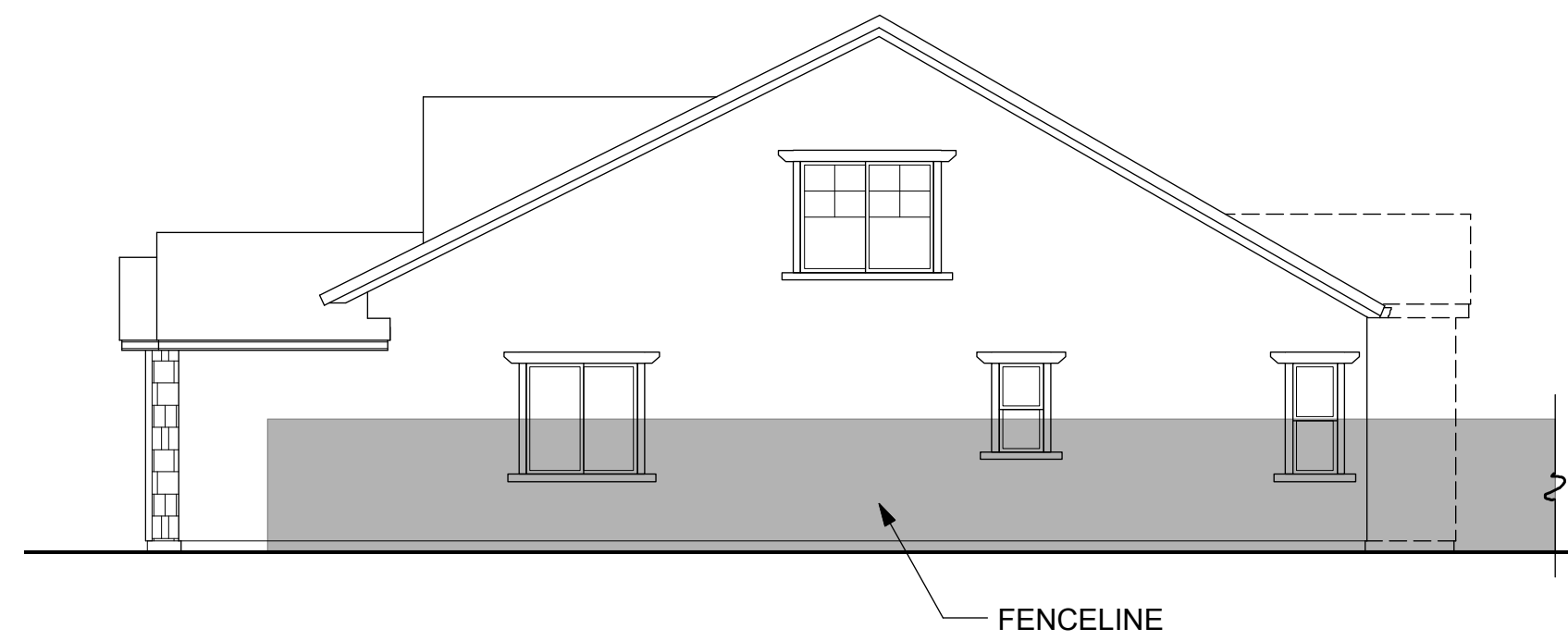
**DEN / FLEX OPTION**

**FIRST FLOOR PLAN (1942 S.F.; 2580 TOTAL S.F.)**

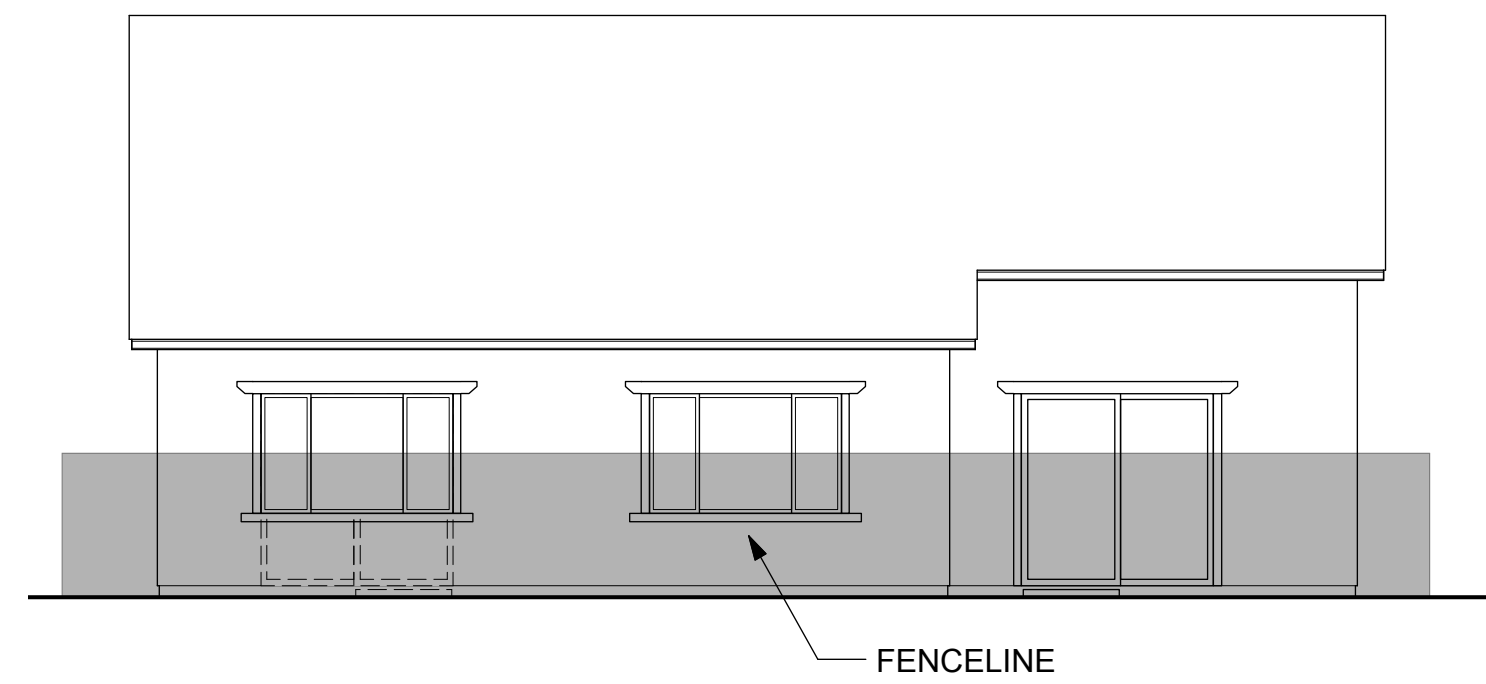


SECOND FLOOR PLAN (628 S.F.)

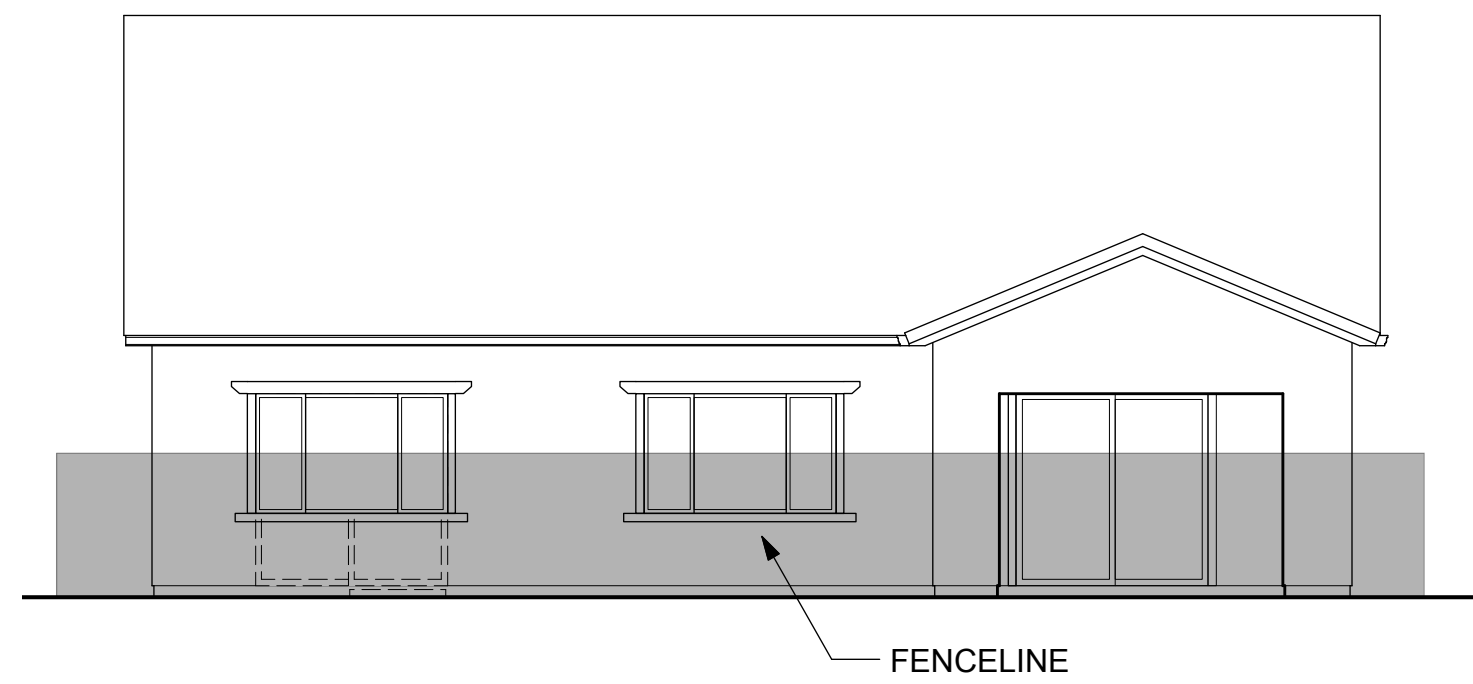




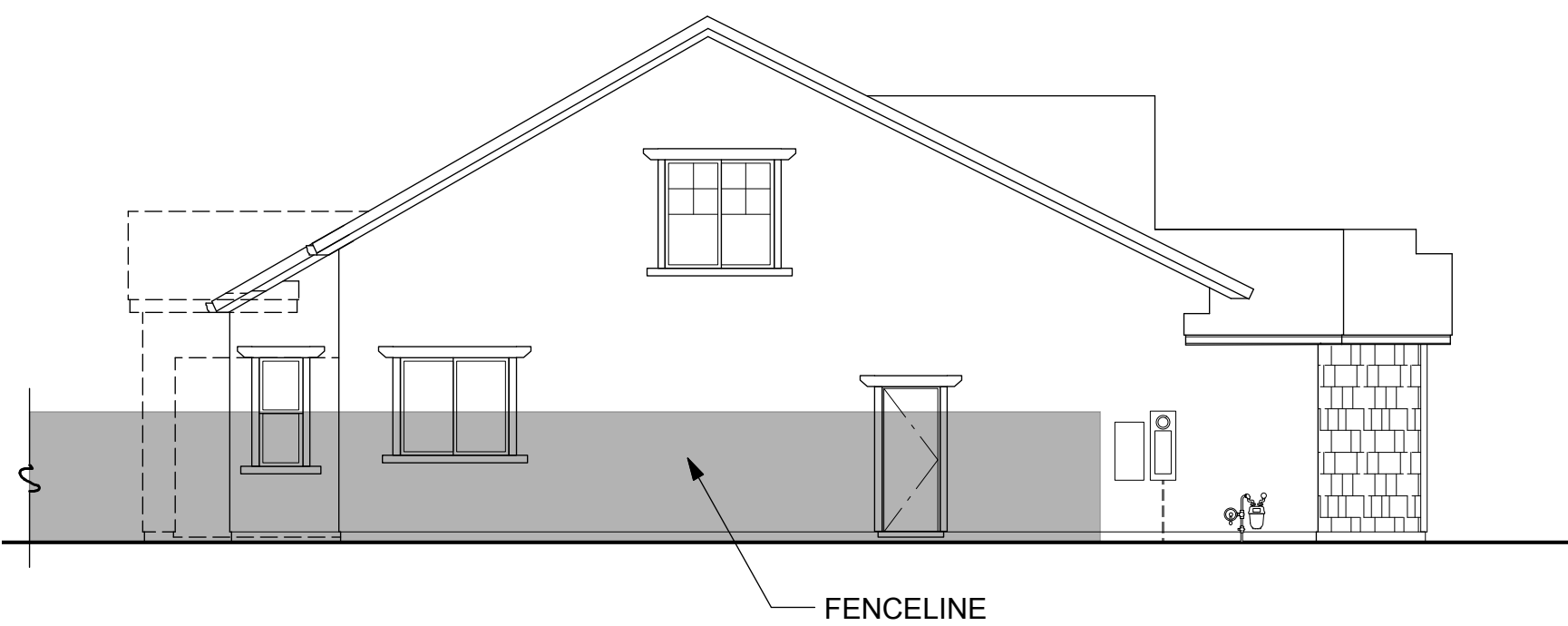
**RIGHT SIDE "B"**



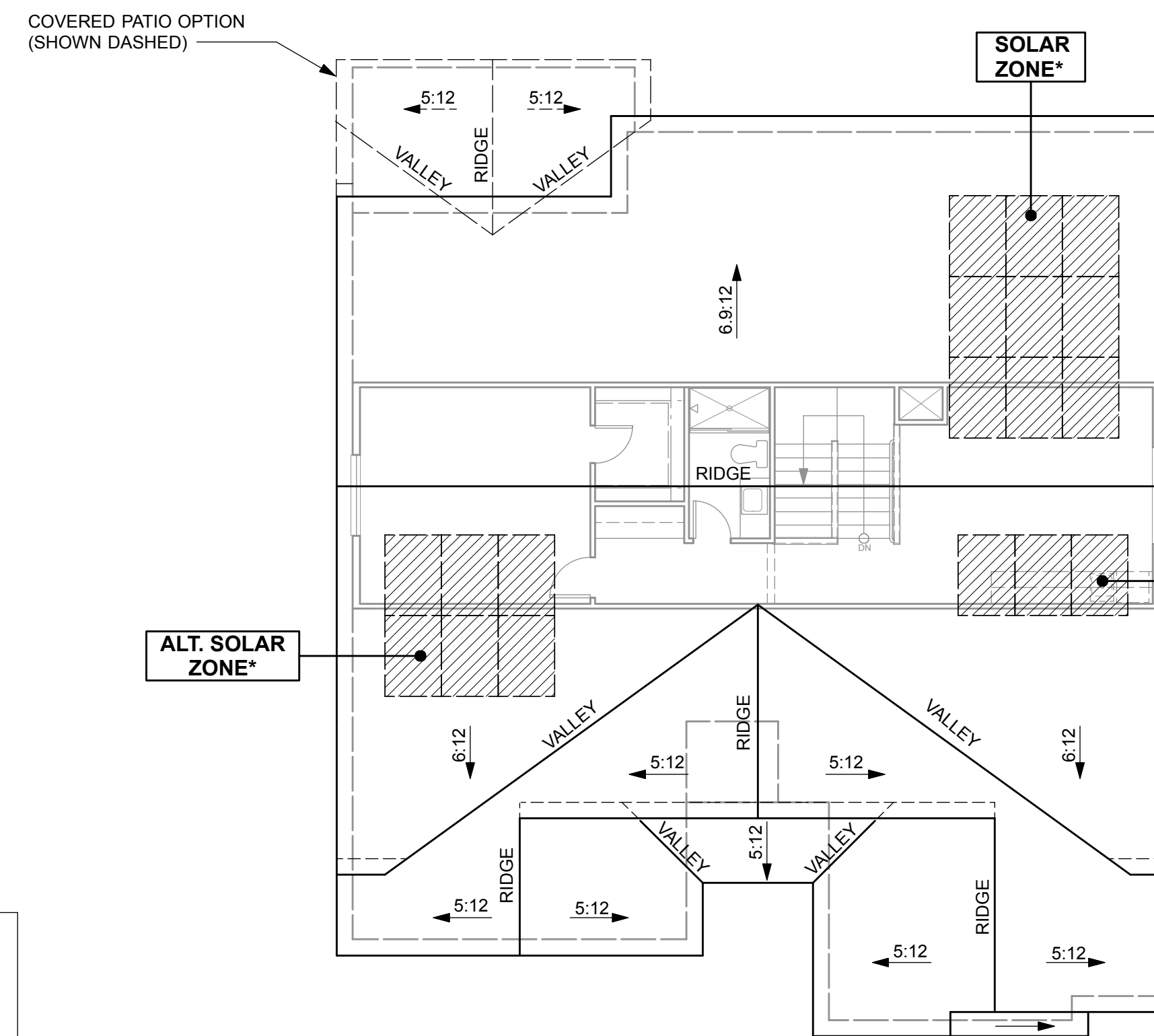
**REAR "B"**



**REAR "B"  
(COVERED PATIO OPTION)**



**LEFT SIDE "B"**



**ROOF PLAN "B"**

**CRAFTSMAN**

- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- WOOD TRIM OVER WOOD SIDING
- FIBER CEMENT SHINGLE SIDING (WHERE SHOWN)
- SHAPED WOOD OUTLOOKERS AT WOOD SIDING
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - "SHAKE" PROFILE



**FRONT ELEVATION "B"  
(CRAFTSMAN)**

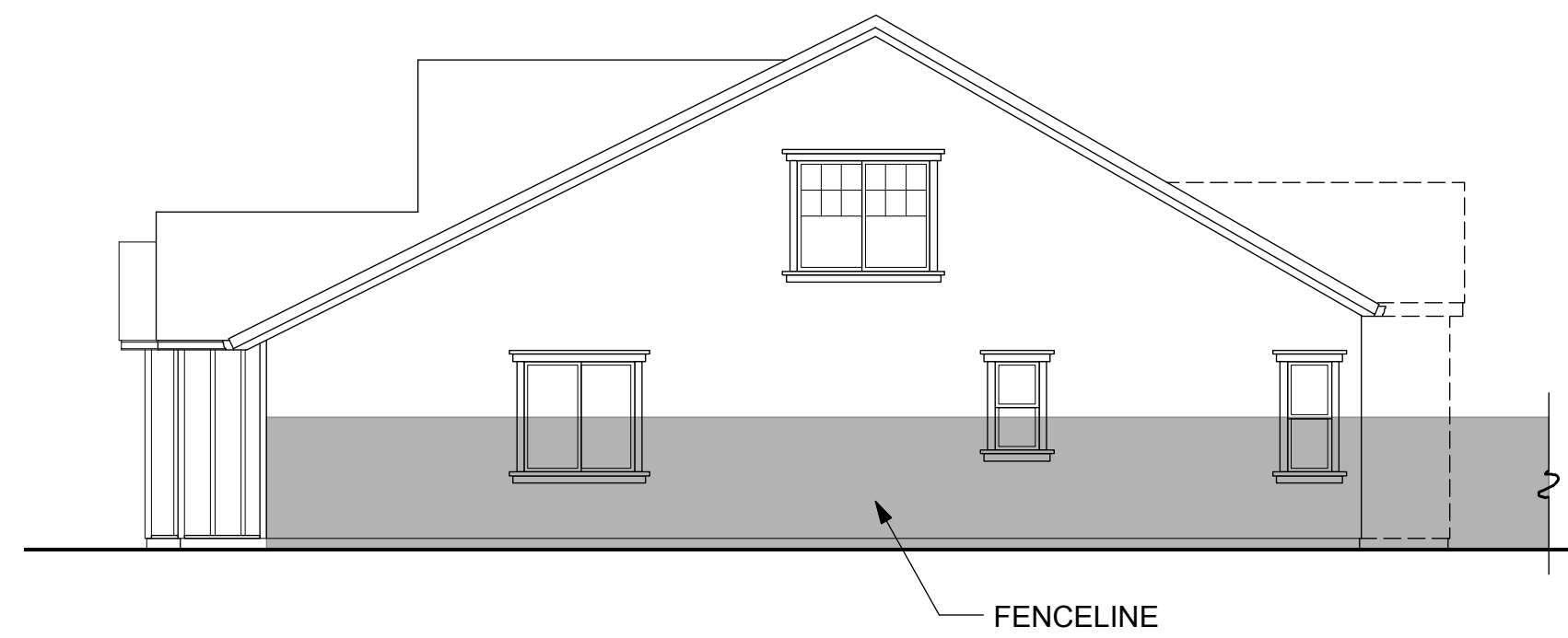
**PLAN 2X  
DIABLO MEADOWS  
Clayton, California**

940 Tyler Street #19  
Benicia, CA 94510  
Phone: (707) 746-6586

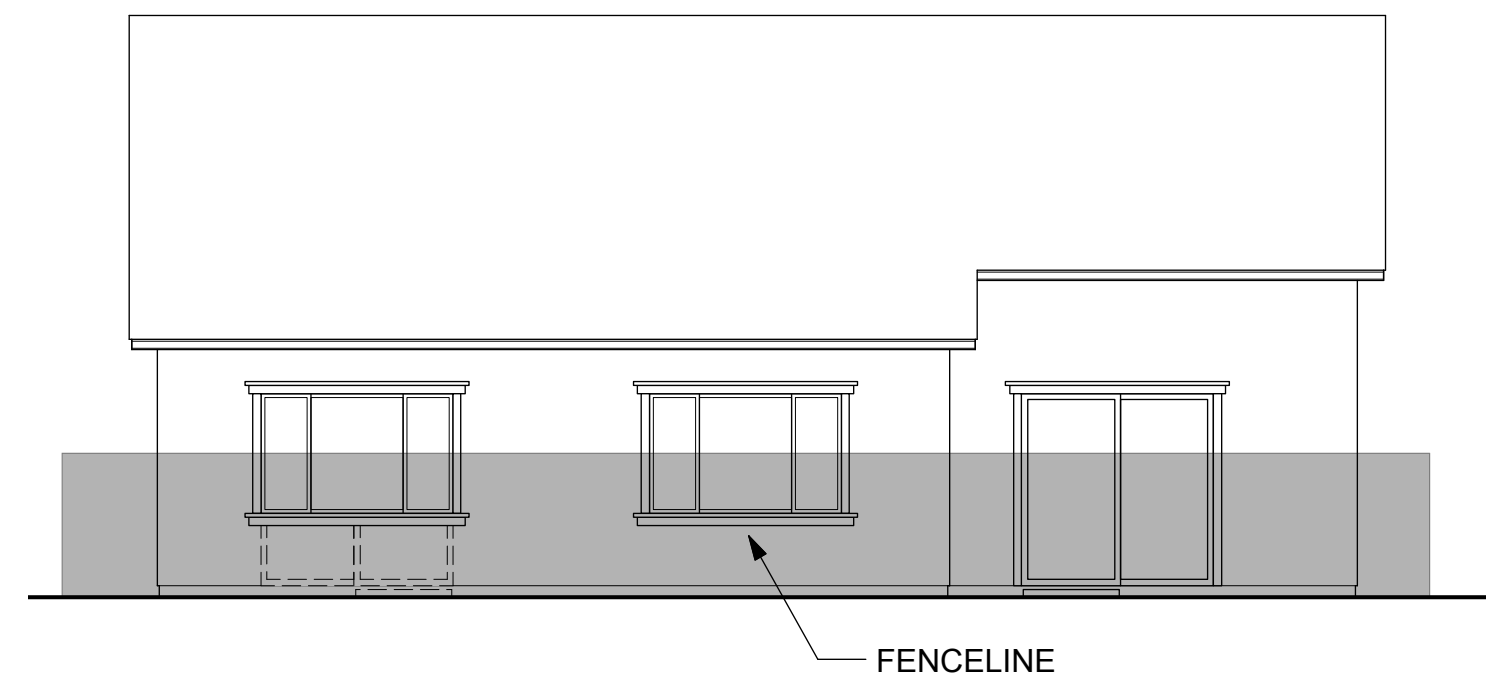


**SHEET A-10**

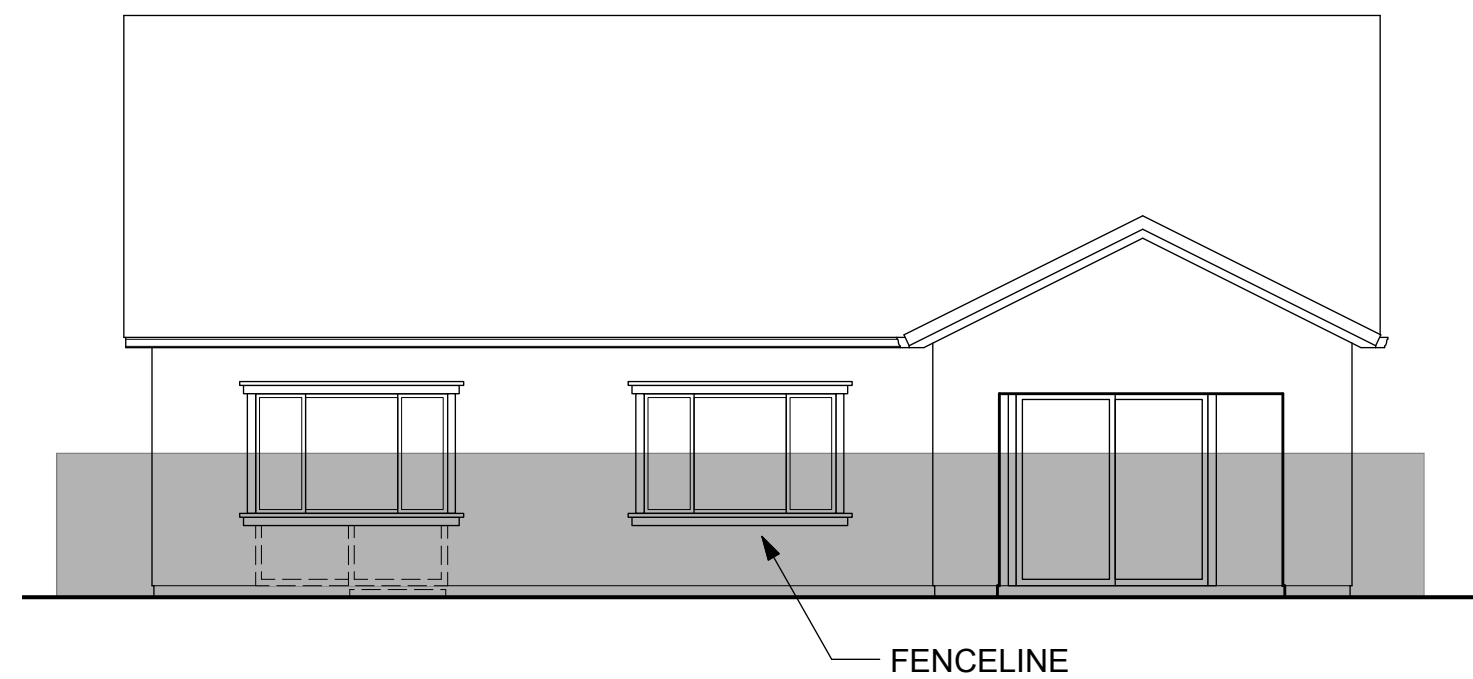
2005 4-22-20



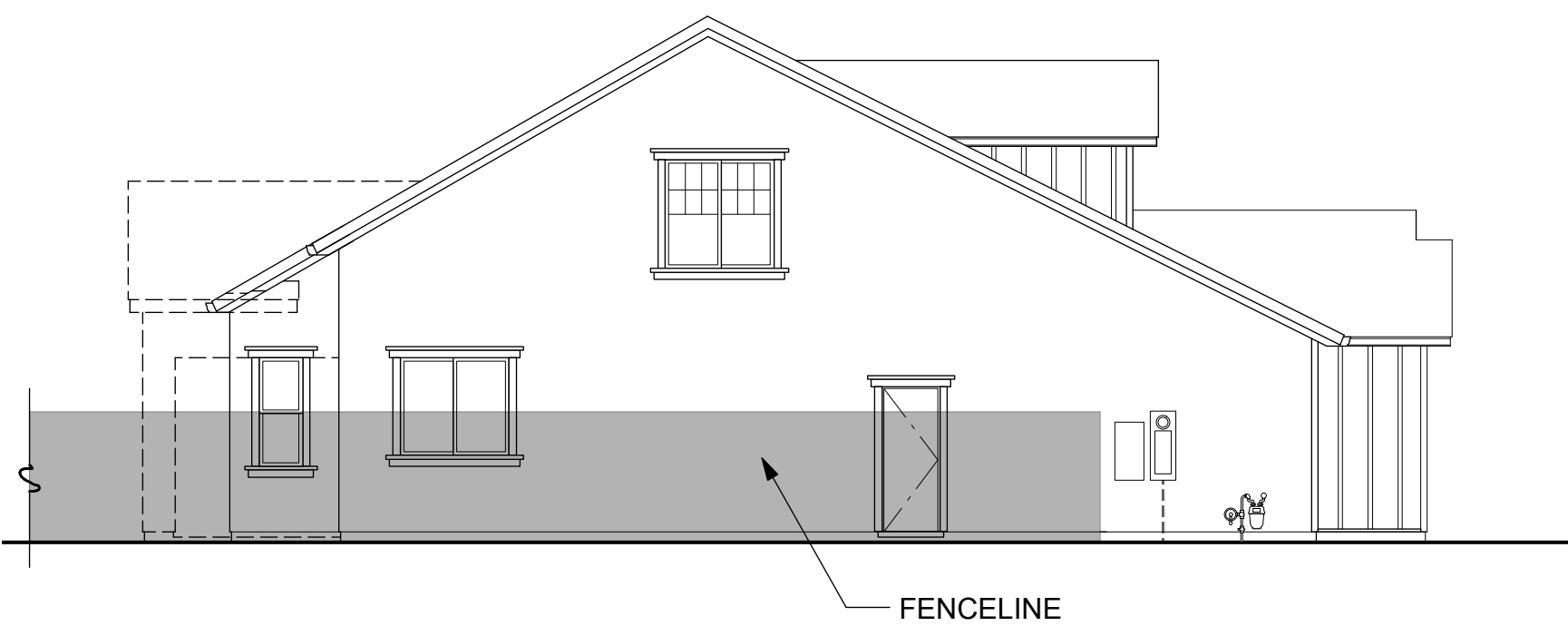
**RIGHT SIDE "C"**



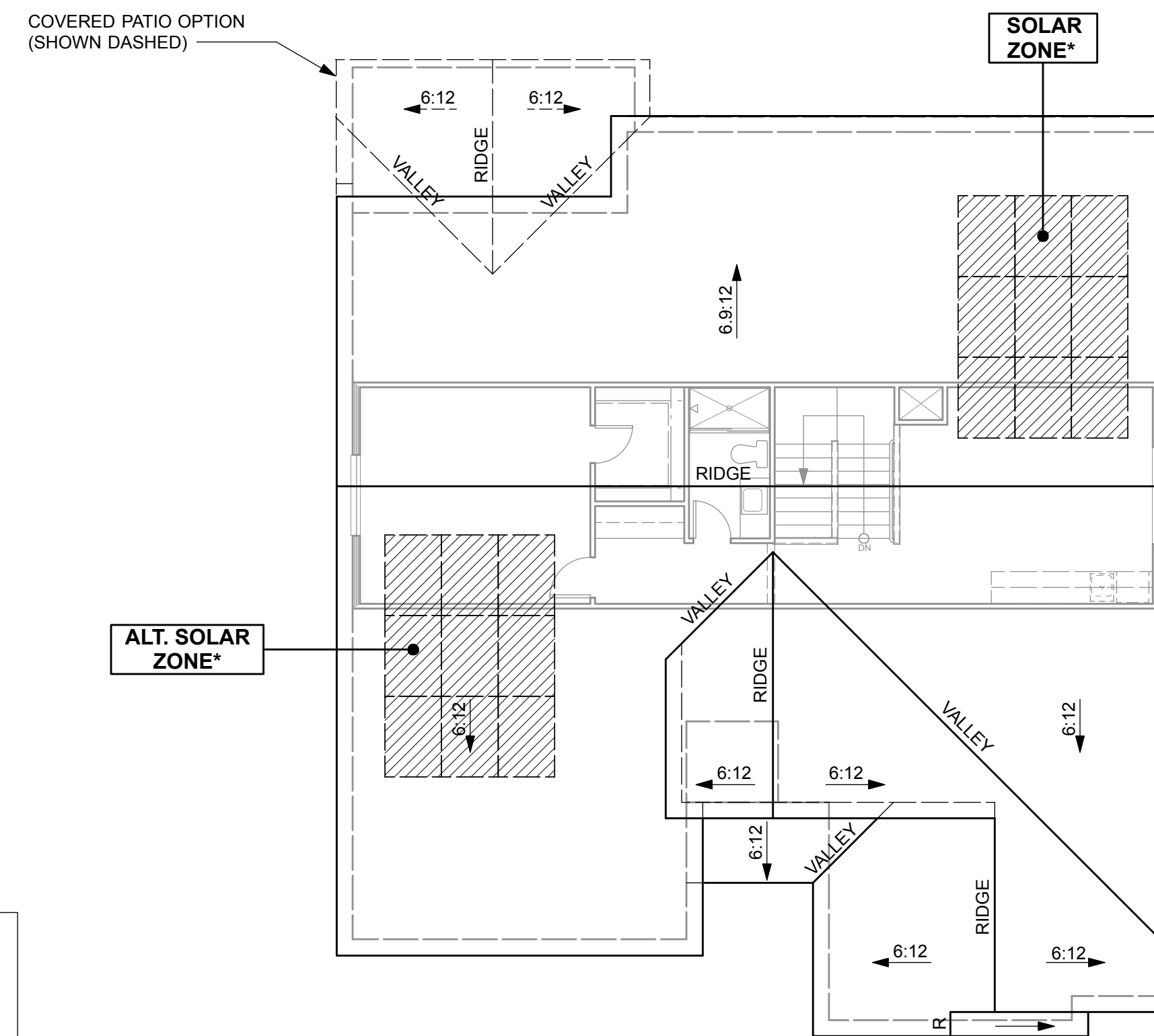
**REAR "C"**



**REAR "C"  
(COVERED PATIO OPTION)**



**LEFT SIDE "C"**



**ROOF PLAN "C"**

**FARMHOUSE**

- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- WOOD TRIM OVER WOOD SIDING
- FIBER CEMENT BOARD AND BATTEN SIDING (WHERE SHOWN)
- WOOD GRAIN FOAM (PLANK AND BATTEN) SHUTTERS
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - "SLATE" PROFILE



**FRONT ELEVATION "C"  
(FARMHOUSE)**

**PLAN 2X  
DIABLO MEADOWS  
Clayton, California**

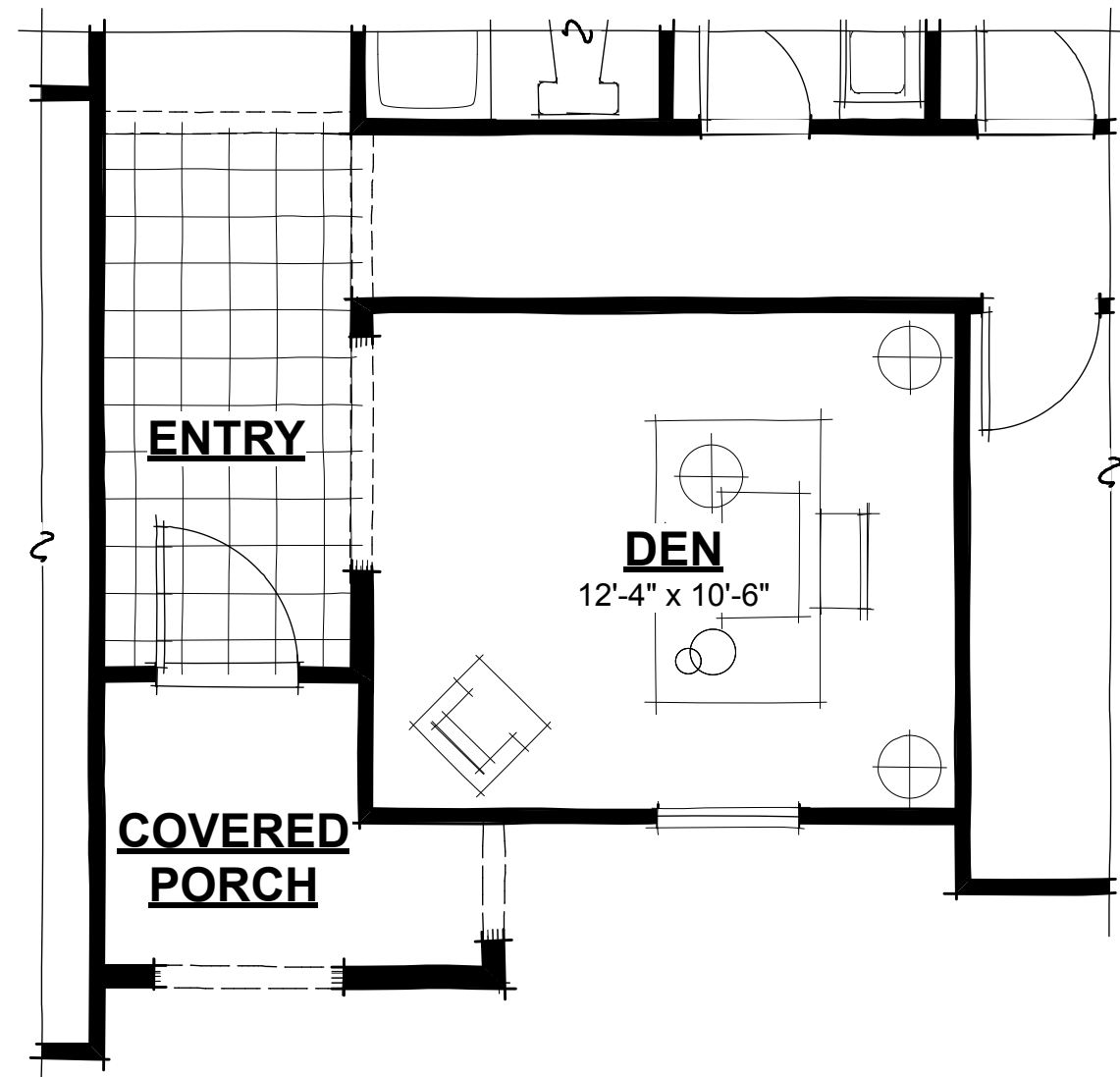
940 Tyler Street #19  
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Phone: (707) 746-6586



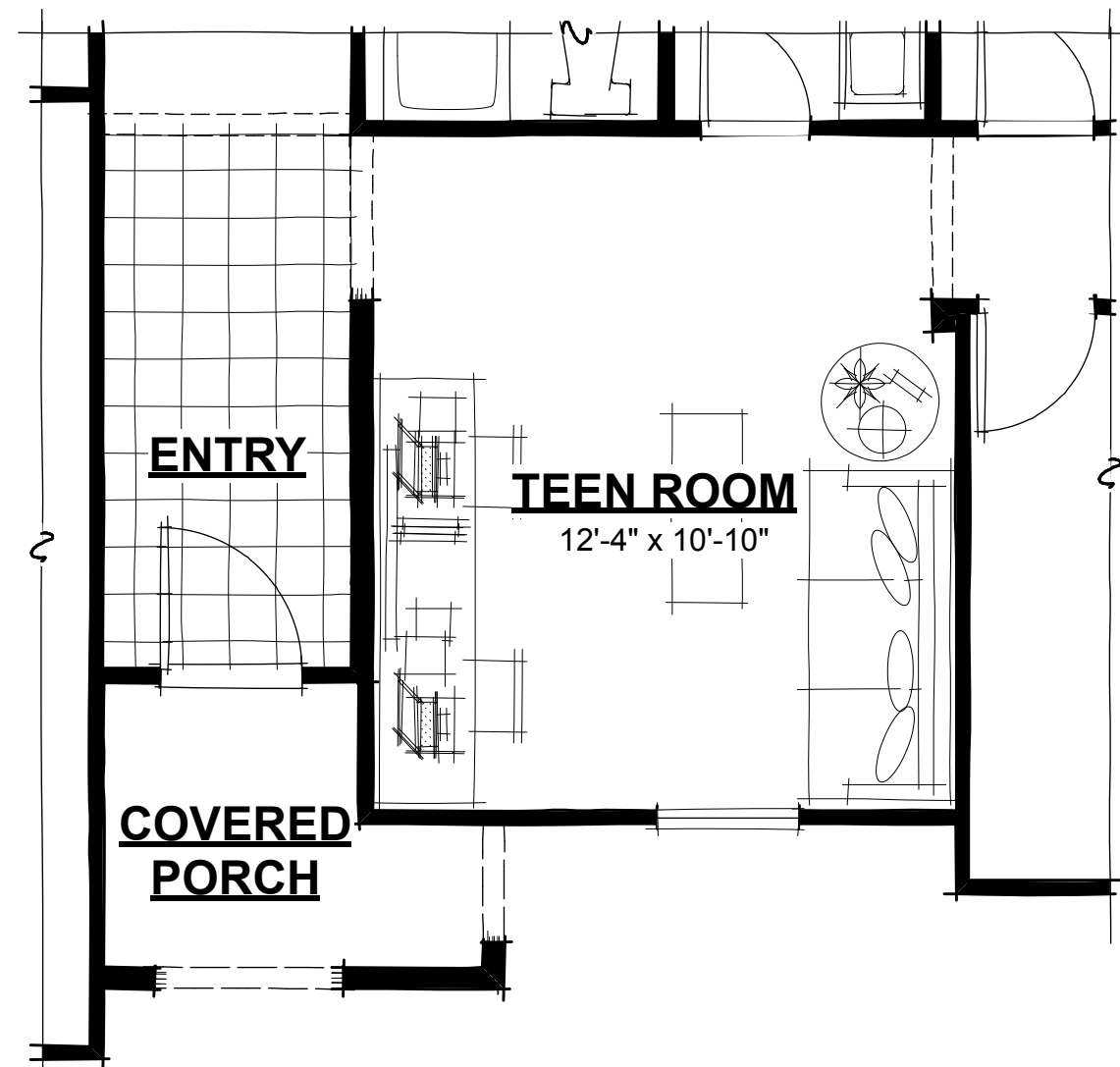
**SHEET A-11**

2005 4-22-20

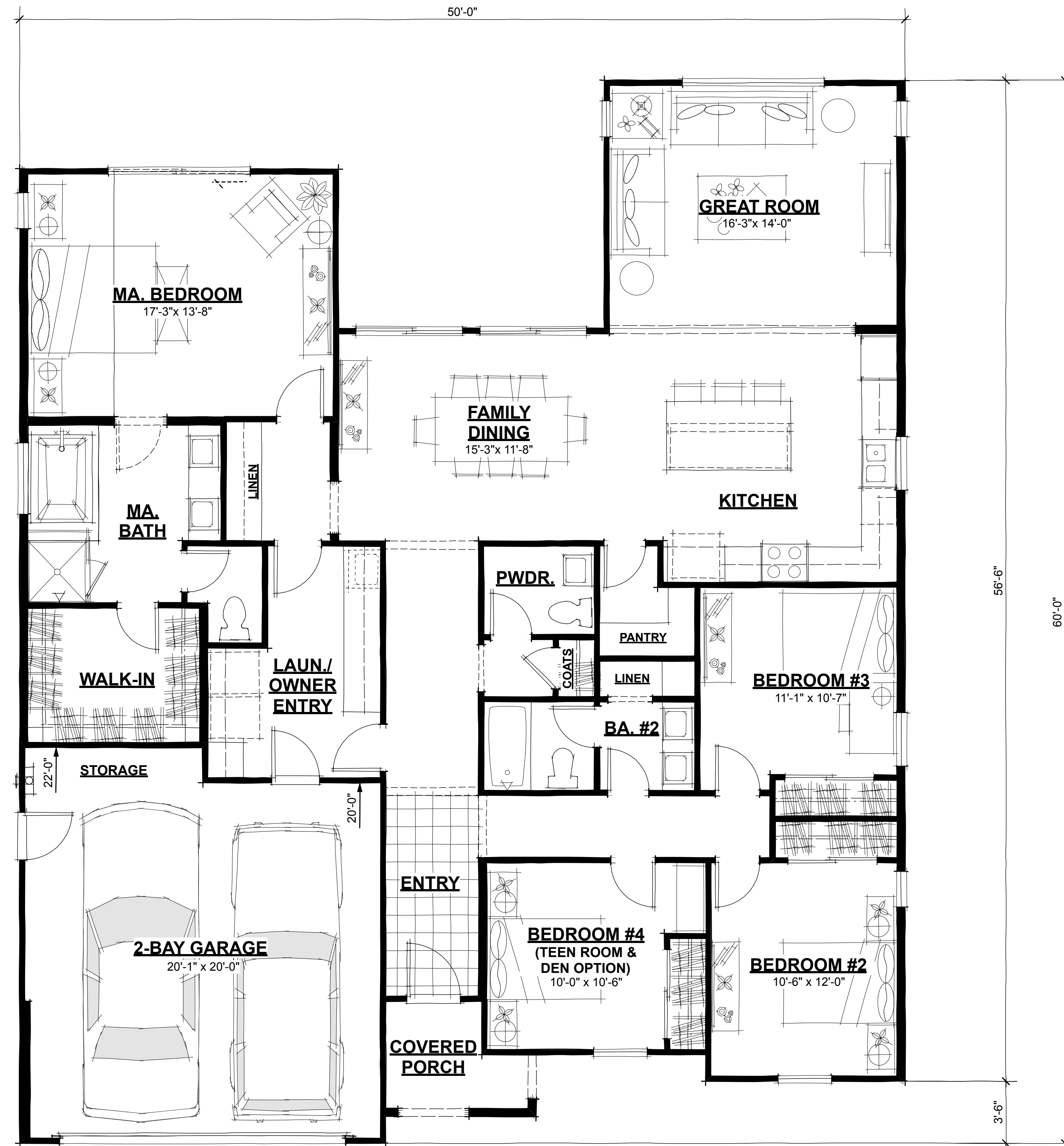




**BEDROOM #4 OPTION**

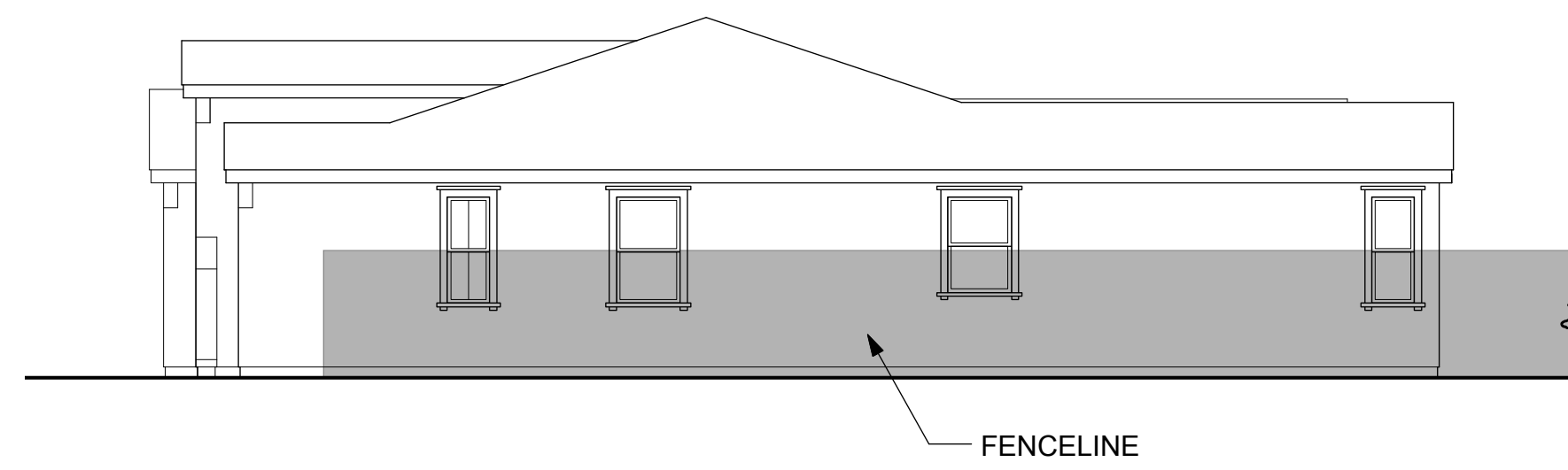


**TEEN ROOM OPTION**

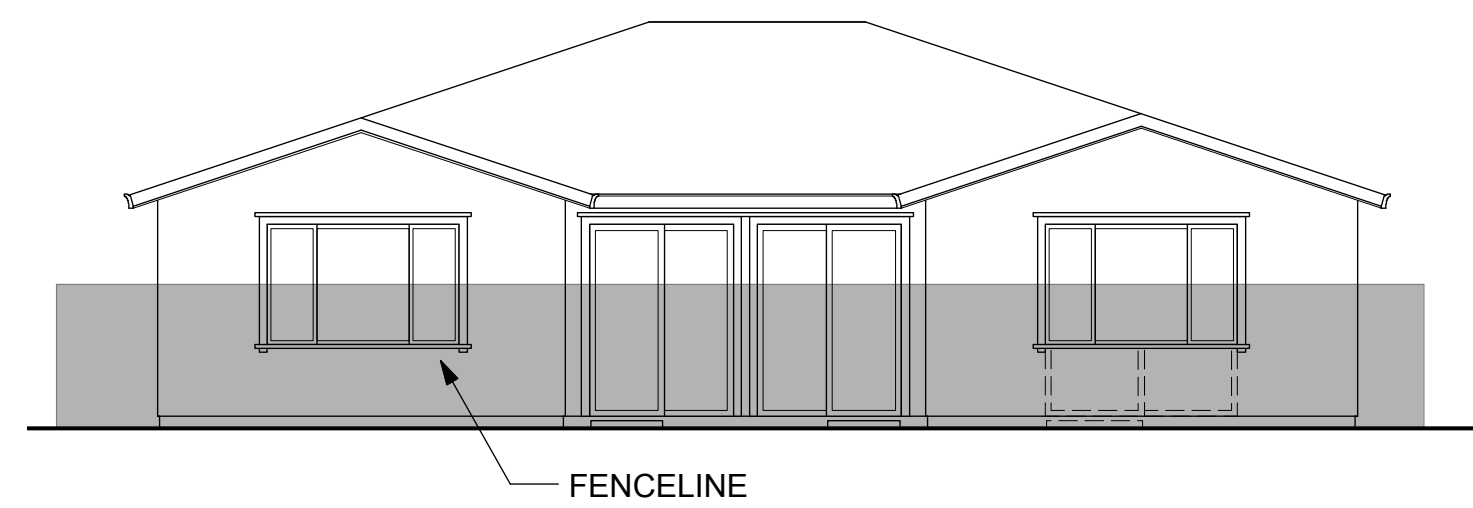


**FLOOR PLAN (2117 S.F.)**

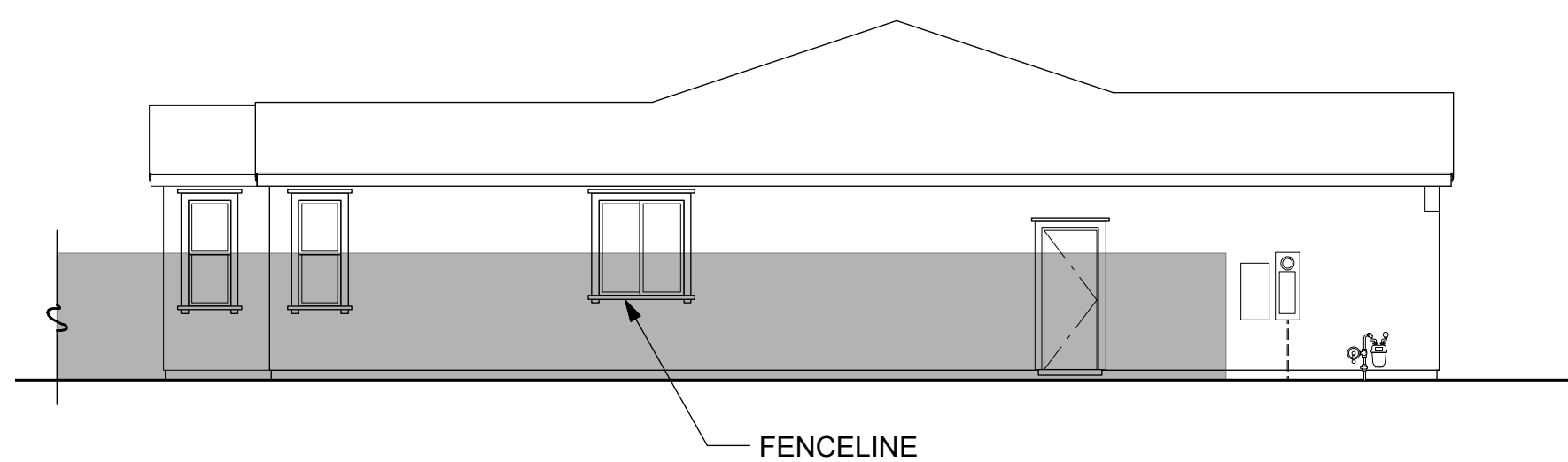
**PLAN 3 (150-2117)**  
**DIABLO MEADOWS**  
Clayton, California



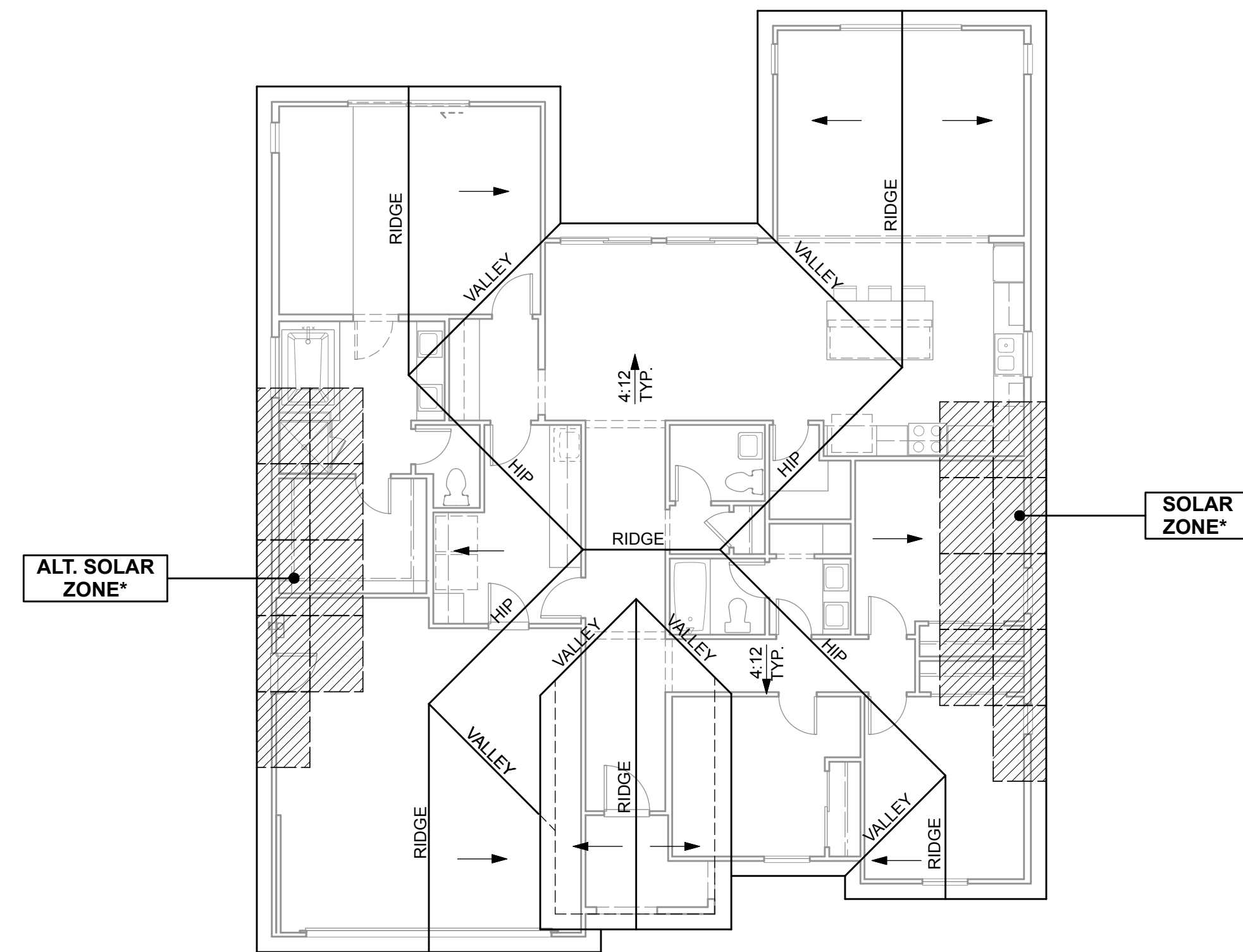
**RIGHT SIDE "A"**



**REAR "A"**



**LEFT SIDE "A"**



**ROOF PLAN "A"**

**SPANISH**

- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- STUCCO OVER SHAPED FOAM CORBELS
- DECORATIVE TILE PIPE VENTS
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - LOW PROFILE "S"

INDICATES RECESS



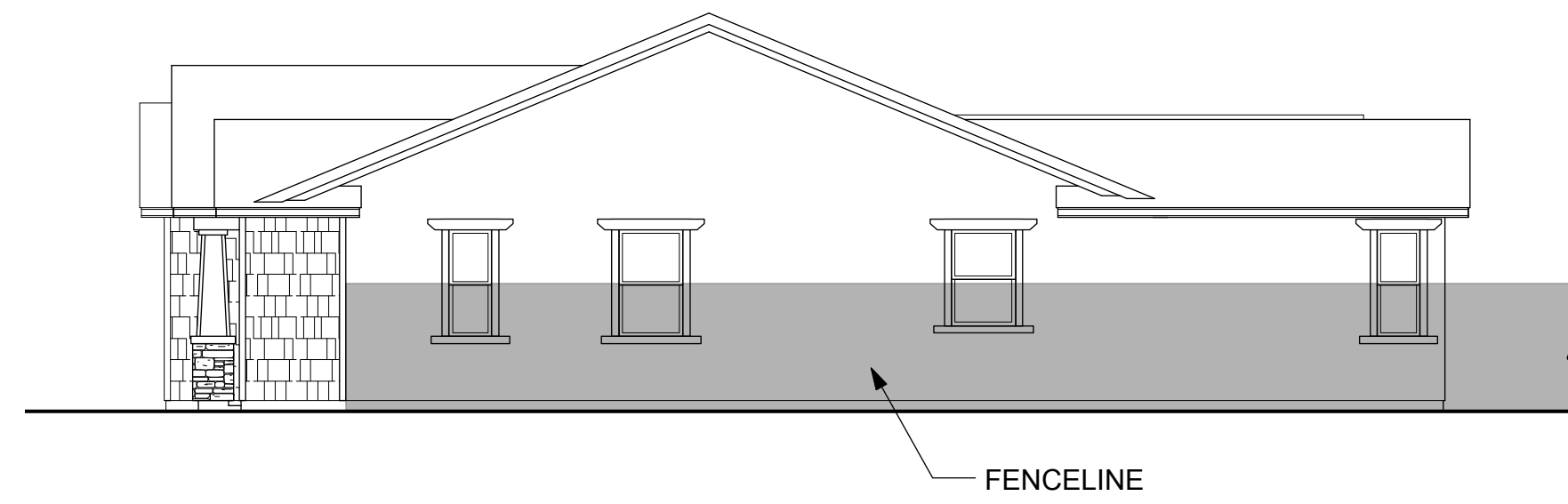
**FRONT ELEVATION "A"**  
**(SPANISH)**

**PLAN 3**  
**DIABLO MEADOWS**  
**Clayton, California**

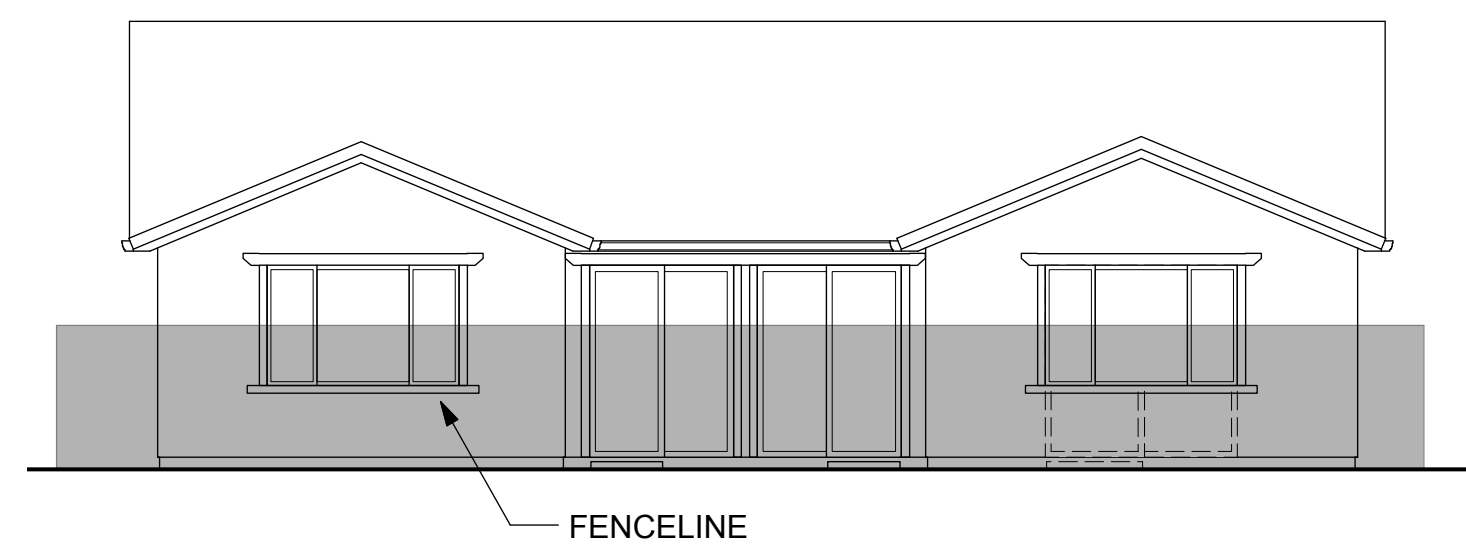
940 Tyler Street #19  
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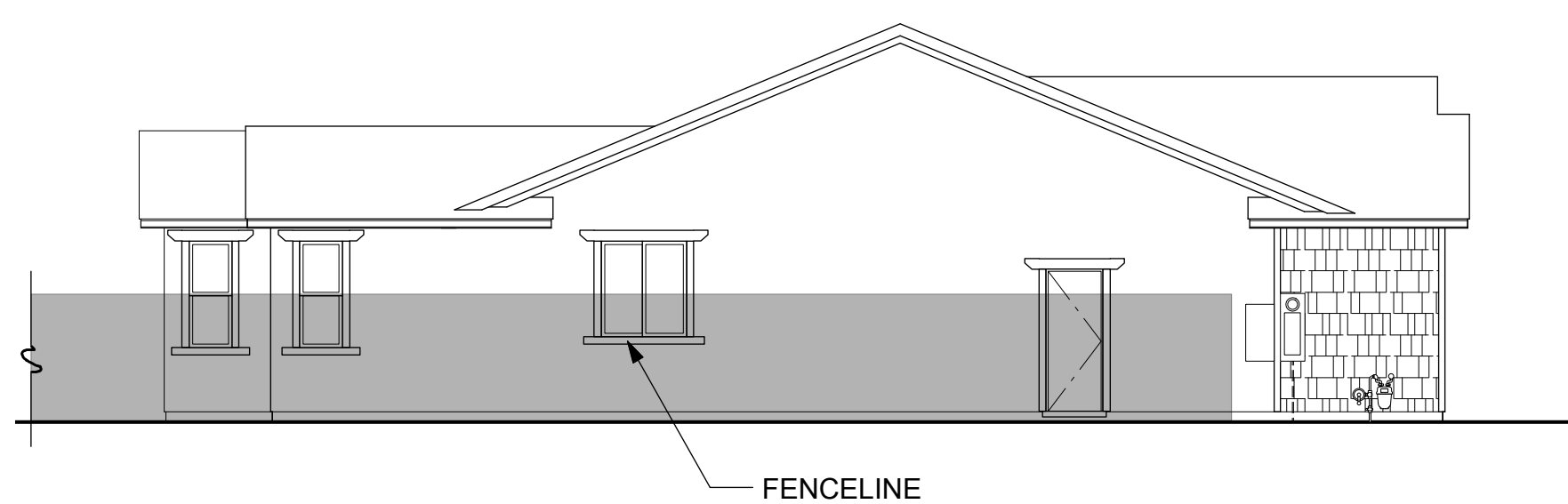
2005 4-22-20



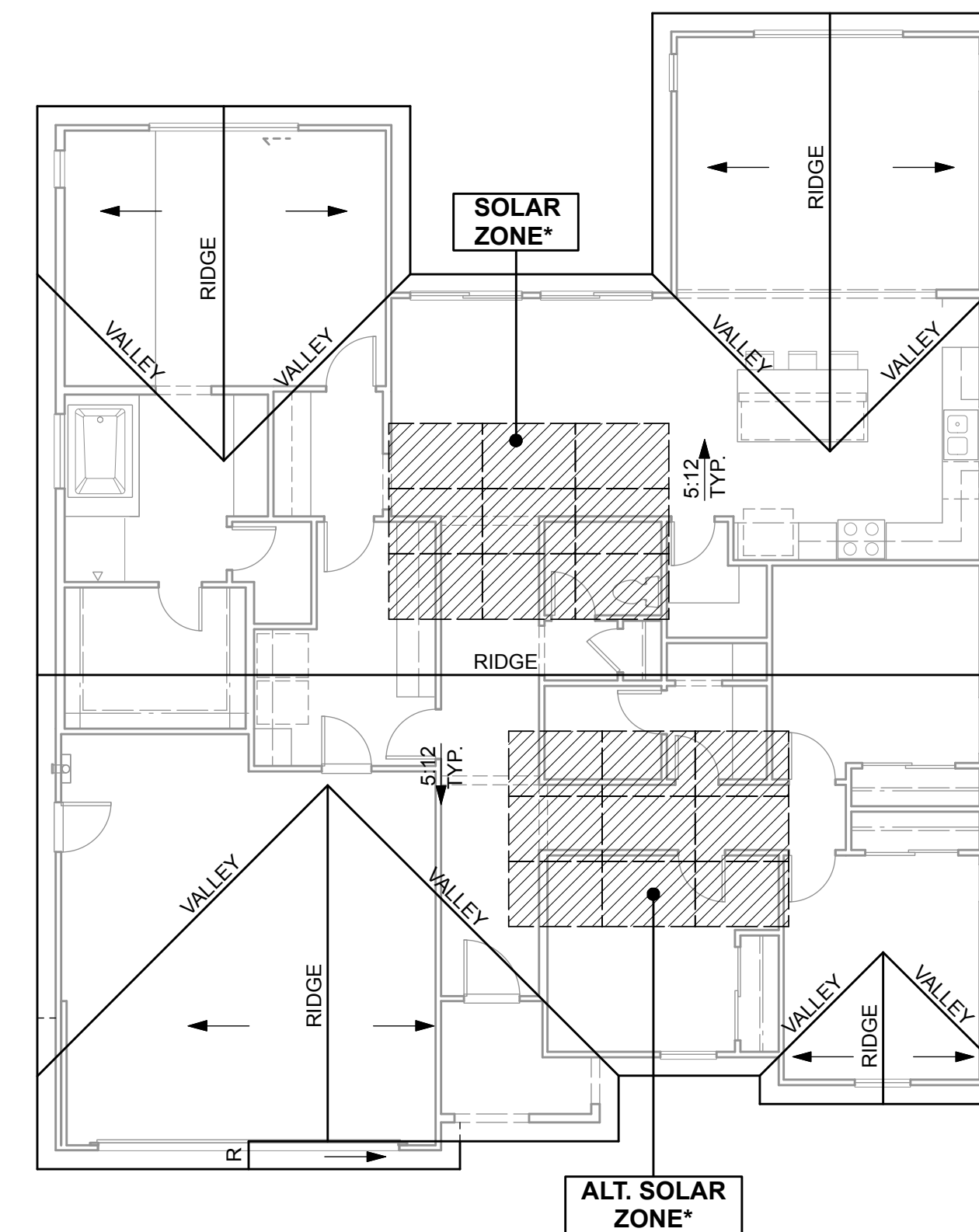
**RIGHT SIDE "B"**



**REAR "B"**



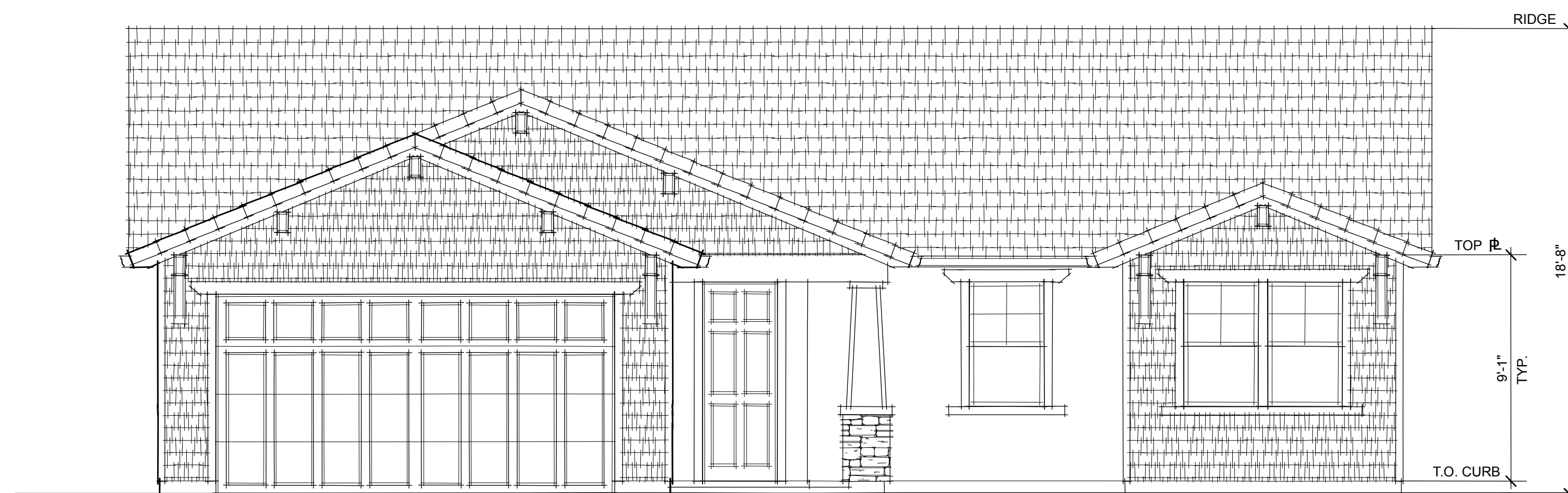
**LEFT SIDE "B"**



**ROOF PLAN "B"**

**CRAFTSMAN**

- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- WOOD TRIM OVER WOOD SIDING
- FIBER CEMENT SHINGLE SIDING (WHERE SHOWN)
- SHAPED WOOD OUTLOOKERS AT WOOD SIDING
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - "SHAKE" PROFILE



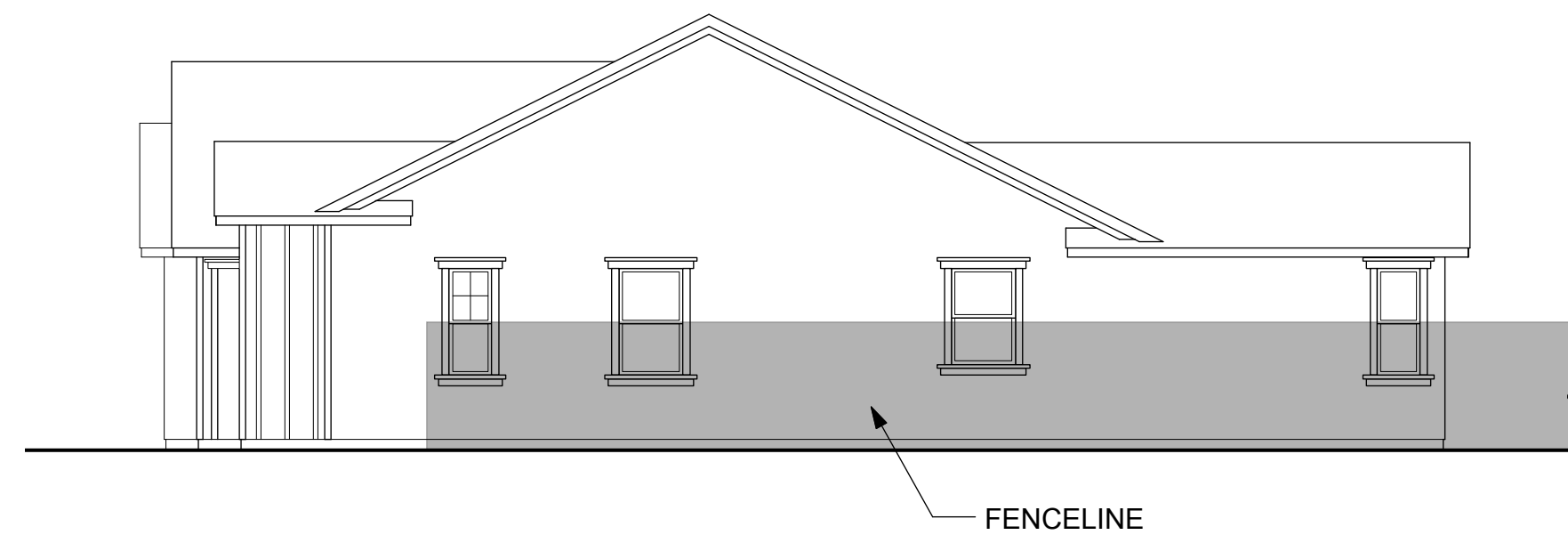
**FRONT ELEVATION "B"**  
**(CRAFTSMAN)**

**PLAN 3**  
**DIABLO MEADOWS**  
**Clayton, California**

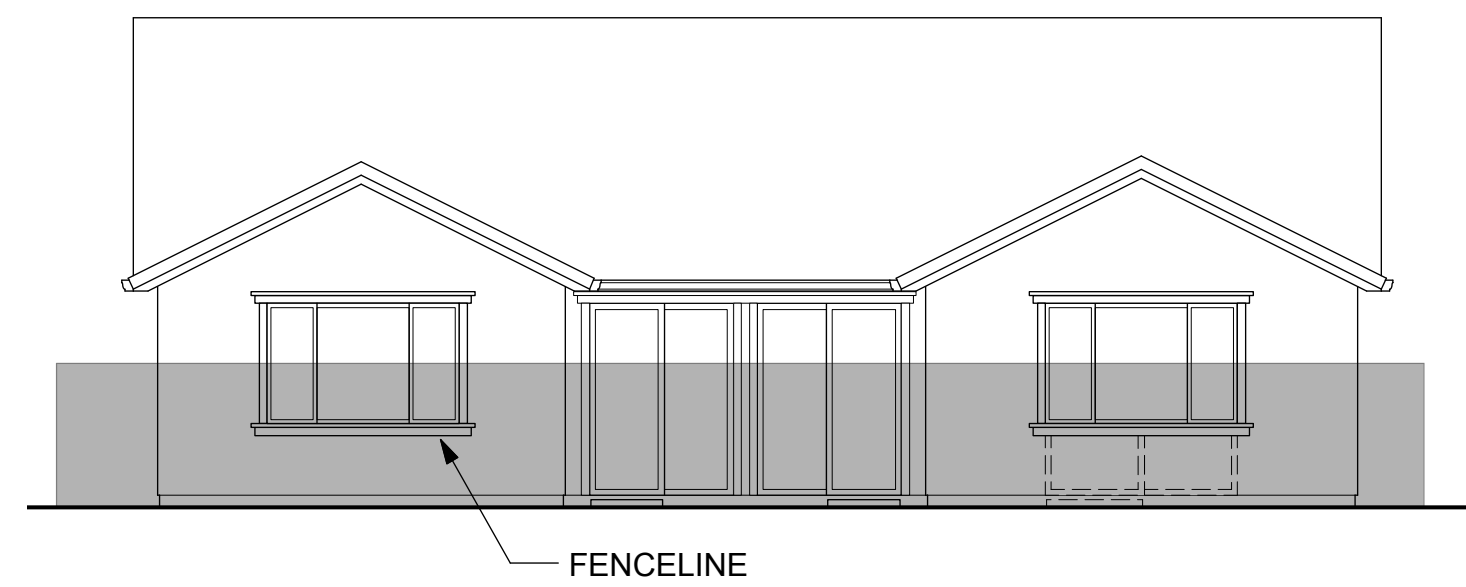
940 Tyler Street #19  
Benicia, CA 94510  
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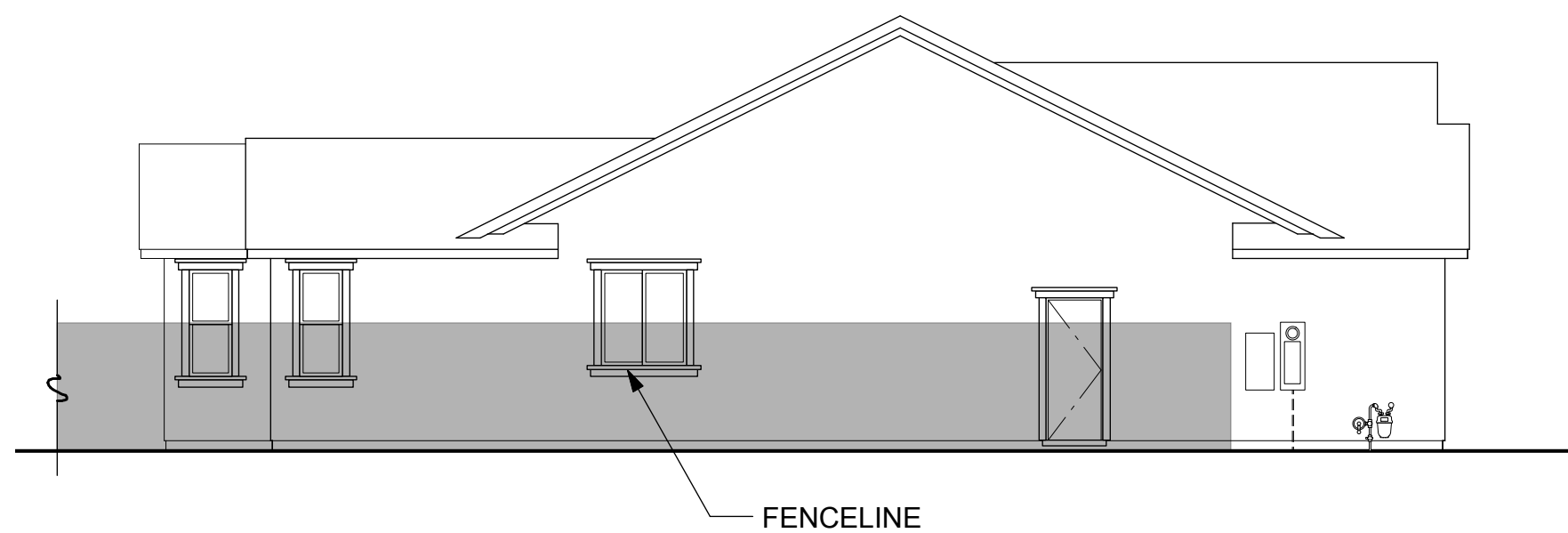
2005 4-22-20



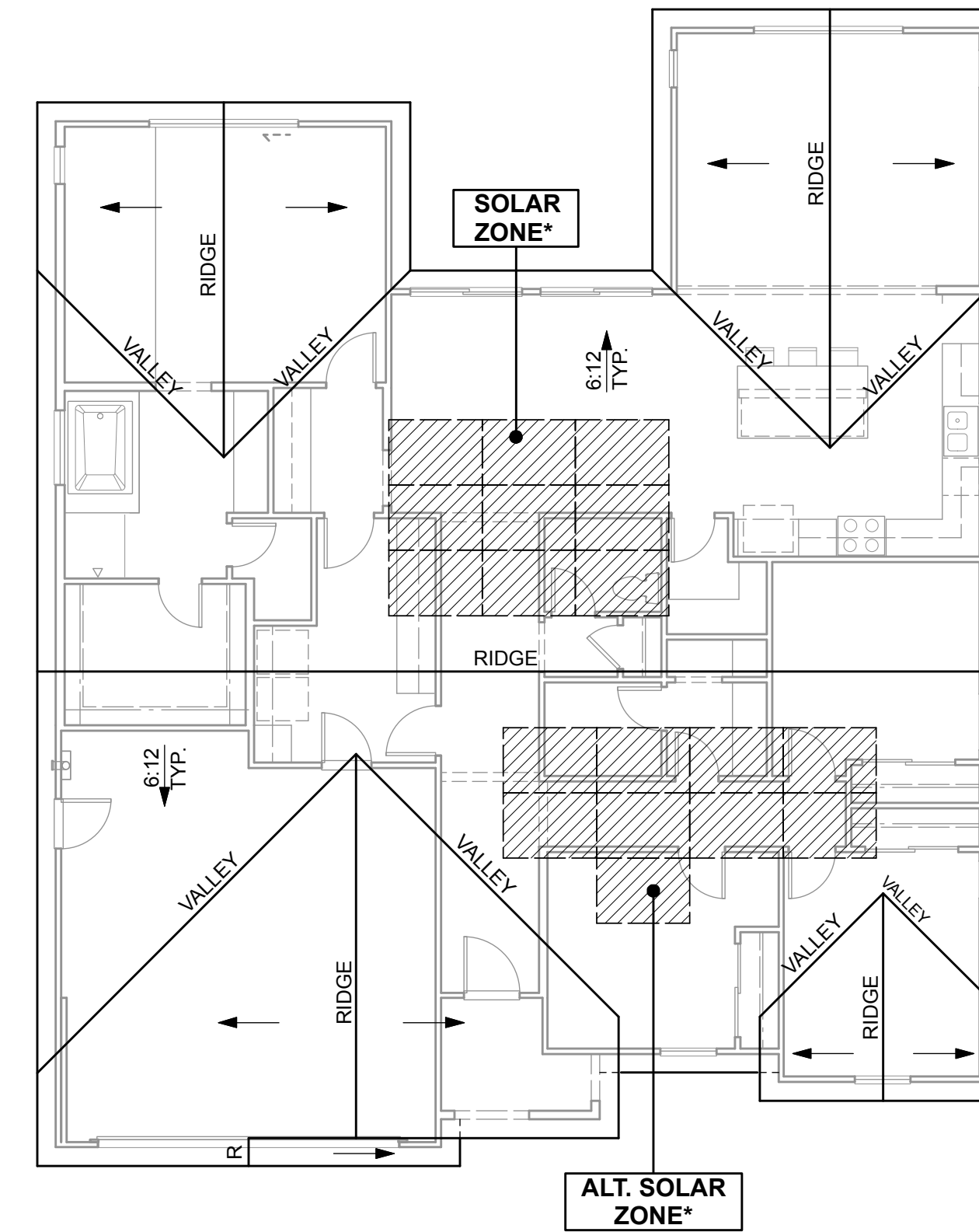
**RIGHT SIDE "C"**



**REAR "C"**



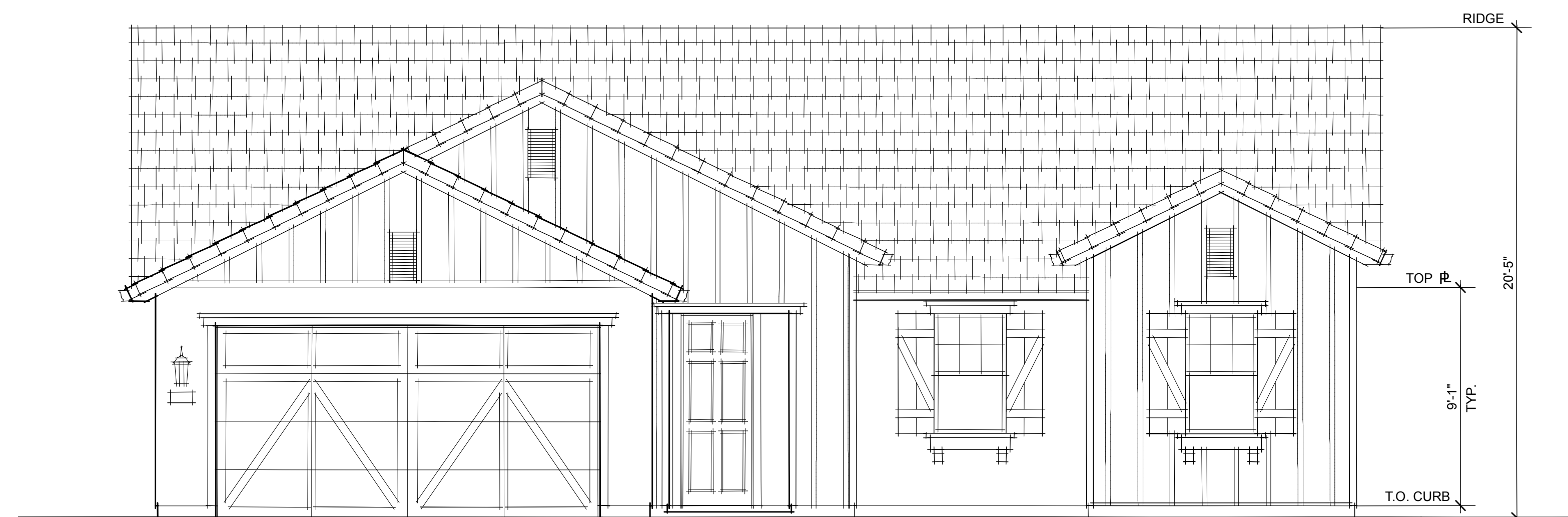
**LEFT SIDE "C"**



**ROOF PLAN "C"**

**FARMHOUSE**

- STUCCO SIDING
- STUCCO OVER FOAM TRIM
- WOOD TRIM OVER WOOD SIDING
- FIBER CEMENT BOARD AND BATTEN SIDING (WHERE SHOWN)
- WOOD GRAIN FOAM (PLANK AND BATTEN) SHUTTERS
- OGEE GUTTERS
- THEME SPECIFIC GARAGE DOOR
- CONCRETE TILE ROOFING - "SLATE" PROFILE



**FRONT ELEVATION "C"  
(FARMHOUSE)**

**PLAN 3  
DIABLO MEADOWS  
Clayton, California**

940 Tyler Street #19  
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2005 4-22-20

ATTACHMENT K - ARCHITECTURAL COLOR SCHEMES

# DIABLO MEADOWS

BY



*Building a Better Community®*

**COLOR SCHEMES  
STONE VENEER  
ROOF MATERIALS**

APRIL 22, 2020



940 Tyler Street, #19 • Benicia, CA 94510 • (707) 746-6586 • fax (707) 746-5448

## COLOR APPLICATIONS

### **SPANISH SCHEMES 1, 2, & 3** (ELEVATIONS "A")

---

COLOR 1 – BODY  
COLOR 2 – TRIM  
COLOR 3 – FASCIA, GARAGE DOOR  
COLOR 4 – FRONT ENTRY DOOR, SHUTTERS

### **CRAFTSMAN SCHEMES 4, 5, & 6** (ELEVATIONS "B")

---

COLOR 1 – BODY  
COLOR 2 – TRIM, FASCIA, KICKERS, CORBELS, & POSTS  
COLOR 3 – SIDING, GARAGE DOOR  
COLOR 4 – FRONT ENTRY DOOR

### **FARMHOUSE SCHEMES 7, 8, & 9** (ELEVATIONS "C")

---

COLOR 1 – BODY  
COLOR 2 – BOARD AND BATTEN SIDING, & FAUX VENT(S)  
COLOR 3 – TRIM, FASCIA, POSTS, & GARAGE DOOR  
COLOR 4 – FRONT ENTRY DOOR, SHUTTERS (AT SCHEMES 8 & 9)  
COLOR 5 – SHUTTERS (AT SCHEME 7)

### **TUSCAN SCHEMES 10, 11, & 12** (ELEVATIONS "D")

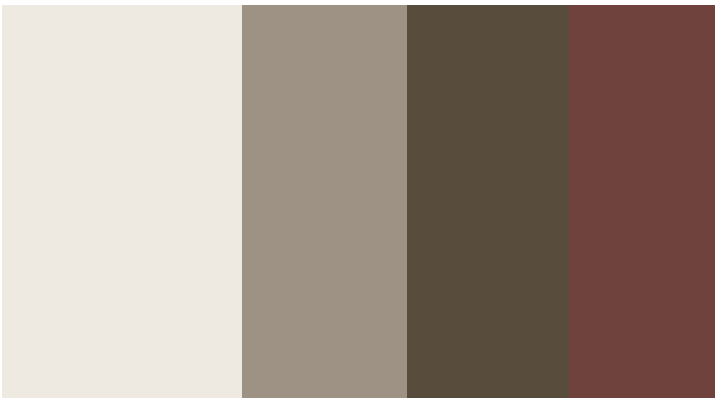
---

COLOR 1 – BODY  
COLOR 2 – FASCIA, EAVES, GUTTERS, CORBELS, & GARAGE DOOR  
COLOR 3 – TRIM  
COLOR 4 – FRONT ENTRY DOOR, SHUTTERS

## SCHEME 1 (Spanish – Elevation “A”)

**SHERWIN-WILLIAMS PAINT:**

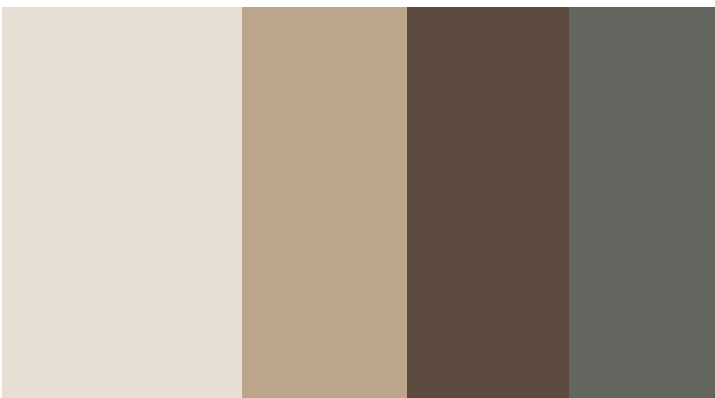
COLOR 1	SW 7001	Marshmallow (stucco)
COLOR 2	SW 7504	Keystone Gray (trim)
COLOR 3	SW 7027	Well-Bread Brown (fascia & garage door)
COLOR 4	SW 7594	Carriage Door (entry door)
<b>EAGLE ROOFING:</b>	2606	Vallejo Range



## SCHEME 2 (Spanish – Elevation “A”)

**SHERWIN-WILLIAMS PAINT:**

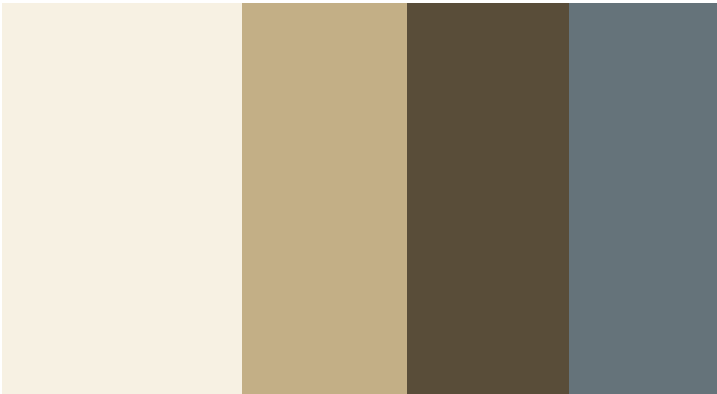
COLOR 1	SW 6084	Modest White (stucco)
COLOR 2	SW 6101	Sands of Time (trim)
COLOR 3	SW 2808	Rockwood Dark Brown (fascia & garage door)
COLOR 4	SW 7061	Night Owl (entry door)
<b>EAGLE ROOFING:</b>	2522	Terracotta Flashed



**SCHEME 3 (Spanish – Elevation “A”)**

**SHERWIN-WILLIAMS PAINT:**

COLOR 1	SW 7104	Cotton White (stucco)
COLOR 2	SW 6122	Camelback (trim)
COLOR 3	SW 7034	Status Bronze (fascia & garage door)
COLOR 4	SW 7624	Slate Tile (entry door)
<b>EAGLE ROOFING:</b>	2605	San Benito Blend



**SCHEME 4 (Craftsman – Elevation “B”)**

**SHERWIN-WILLIAMS PAINT:**

COLOR 1	SW 7547	Sandbar (stucco)
COLOR 2	SW 7025	Backdrop (trim & fascia)
COLOR 3	SW 6083	Sable (siding & garage door)
COLOR 4	SW 6076	Tukish Coffee (entry door)
<b>EAGLE ROOFING:</b>	5687	Brown Gray Range
<b>ENVIRONMENTAL STONWORKS:</b>		Cessna Tan Weathered Edge Ledge Stone



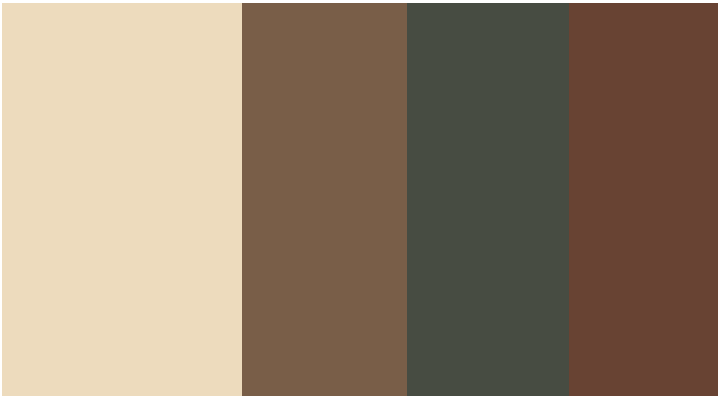


# DIABLO CANYON

## SCHEME 5 (Craftsman – Elevation “B”)

**SHERWIN-WILLIAMS PAINT:**

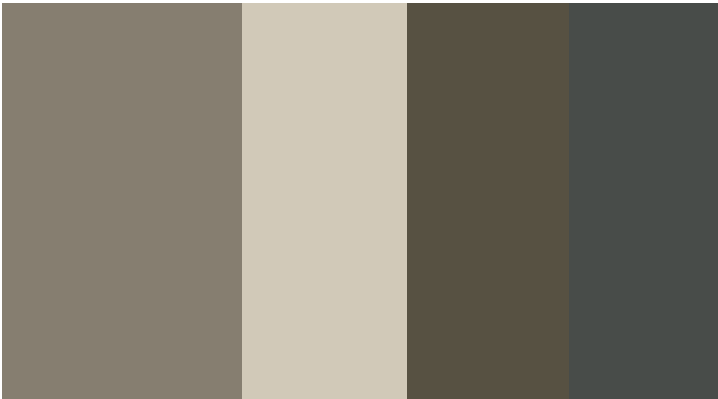
COLOR 1	SW 7678	Cottage Cream (stucco)
COLOR 2	SW 6089	Grounded (trim & fascia)
COLOR 3	SW 6209	Ripe Olive (siding & garage door)
COLOR 4	SW 6062	Rugged Brown (entry door)
<b>EAGLE ROOFING:</b>	5502	Arcadia Canyon Brown
<b>ENVIRONMENTAL STONeworks:</b>		Northwoods Weathered Edge Ledgstone



## SCHEME 6 (Craftsman – Elevation “B”)

**SHERWIN-WILLIAMS PAINT:**

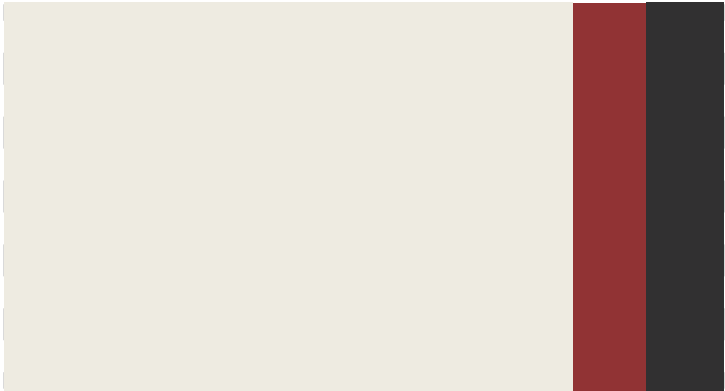
COLOR 1	SW 7053	Adaptive Shade (stucco)
COLOR 2	SW 7036	Accessible Beige (trim & fascia)
COLOR 3	SW 7055	Enduring Bronze (siding & garage door)
COLOR 4	SW 7062	Rock Bottom (entry door)
<b>EAGLE ROOFING:</b>	5690	Pewter Bronze Blend
<b>ENVIRONMENTAL STONeworks:</b>		Sierra Weathered Edge Ledgestone



## SCHEME 7 (Farmhouse – Elevation “C”)

### SHERWIN-WILLIAMS PAINT:

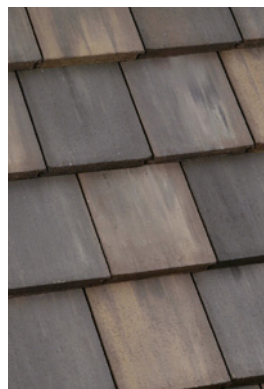
COLOR 1	SW 7008	Alabaster (stucco)
COLOR 2	SW 7008	Alabaster (board and batten)
COLOR 3	SW 7008	Alabaster (trim, fascia & garage door)
COLOR 4	SW 6321	Red Bay (entry door)
COLOR 5	SW 6990	Caviar (shutters)
<b>EAGLE ROOFING:</b>	4697	Slate Range



## SCHEME 9 (Modern Farmhouse – Elevation “C”)

### SHERWIN-WILLIAMS PAINT:

COLOR 1	SW 7025	Backdrop (stucco)
COLOR 2	SW 6061	Tanbark (board and batten)
COLOR 3	SW 7562	Roman Column (trim, fascia & garage door)
COLOR 4	SW 7069	Iron Ore (entry door & shutters)
<b>EAGLE ROOFING:</b>	202 BL	Concord Blend



## SCHEME 9 (Farmhouse – Elevation “C”)

### SHERWIN-WILLIAMS PAINT:

COLOR 1	SW 7023	Requisite Grey (stucco)
COLOR 2	SW 7005	Pure White (board and batten)
COLOR 3	SW 7005	Pure White (trim, fascia & garage door)
COLOR 4	SW 7025	Backdrop (entry door & shutters)
<b>EAGLE ROOFING:</b>	SCB8802	Nantucket Blend



## SCHEME 10 (Tuscan – Elevation “D”)

### SHERWIN-WILLIAMS PAINT:

COLOR 1	SW 6122	Camelback (stucco)
COLOR 2	SW 6067	Mocha (fascia, gutters, corbels, garage door)
COLOR 3	SW 7504	Keystone (trim)
COLOR 4	SW 7741	Willow Tree (entry door & shutters)
<b>EAGLE ROOFING:</b>	2605	San Benito Blend
<b>ENVIRONMENTAL STONeworks:</b>		Taupe Fieldstone



## SCHEME 11 (Tuscan – Elevation “D”)

### SHERWIN-WILLIAMS PAINT:

COLOR 1	SW 6130	Mannered Gold (stucco)
COLOR 2	SW 6083	Sable (fascia, gutters, corbels, garage door)
COLOR 3	SW 7566	Westhighland White (trim)
COLOR 4	SW 6125	Craft Paper (entry door & shutters)

**EAGLE ROOFING:** 2615 Weathered Terracotta Range

**ENVIRONMENTAL STONeworks:** Southwest Fieldstone



## SCHEME 12 (Tuscan – Elevation “D”)

### SHERWIN-WILLIAMS PAINT:

COLOR 1	SW 7503	Sticks & Stones (stucco)
COLOR 2	SW 2856	Fairfax Brown (fascia, gutters, corbels, garage door)
COLOR 3	SW 7004	Snowbound (trim)
COLOR 4	SW 7505	Manor House (entry door & shutters)

**EAGLE ROOFING:** 2689 Brown Range

**ENVIRONMENTAL STONeworks:** La Mirada Fieldstone



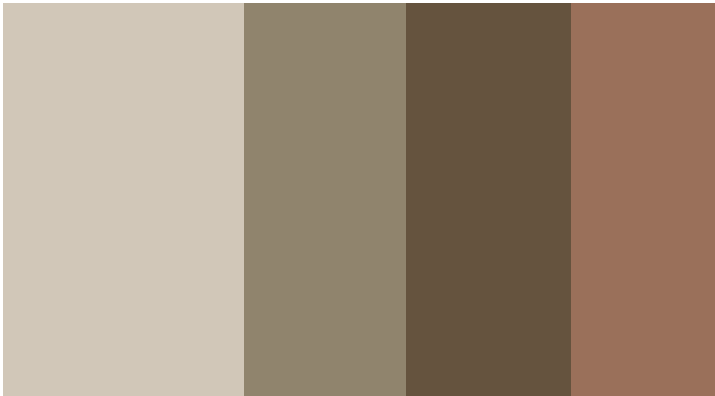
## SCHEME ALT (Tuscan – Elevation “D”)

### SHERWIN-WILLIAMS PAINT:

COLOR 1	SW 7036	Accessible Beige (stucco)
COLOR 2	SW 6151	Quiver Tan (fascia, gutters, corbels, garage door)
COLOR 3	SW 6104	Kaffee (trim)
COLOR 4	SW 7705	Wheat Penny (entry door & shutters)

**EAGLE ROOFING:** 2645 Sunrise Blend

**ENVIRONMENTAL STONeworks:** Taupe Fieldstone



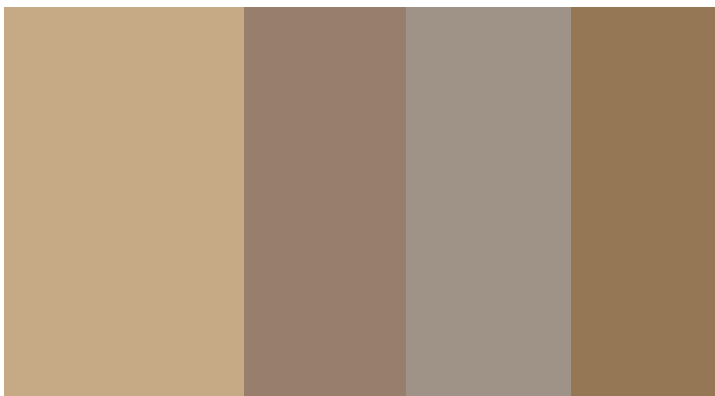
## SCHEME ALT (Tuscan – Elevation “D”)

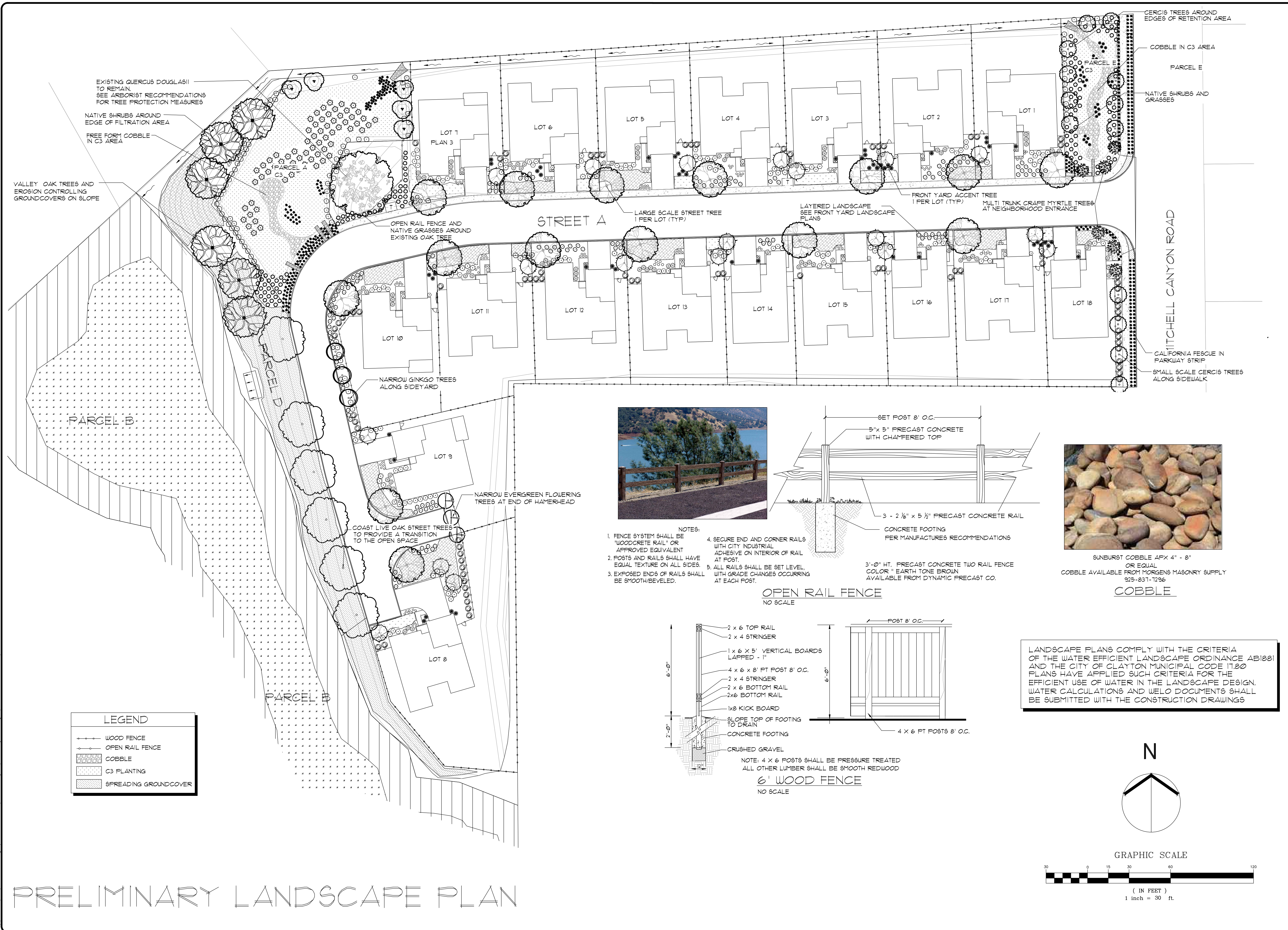
### SHERWIN-WILLIAMS PAINT:

COLOR 1	SW 6122	Camelback (stucco)
COLOR 2	SW 6067	Mocha (fascia, gutters, corbels, garage door)
COLOR 3	SW 7504	Keystone (trim)
COLOR 4	SW 6095	Toasty (entry door & shutters)

**EAGLE ROOFING:** 2605 San Benito Blend

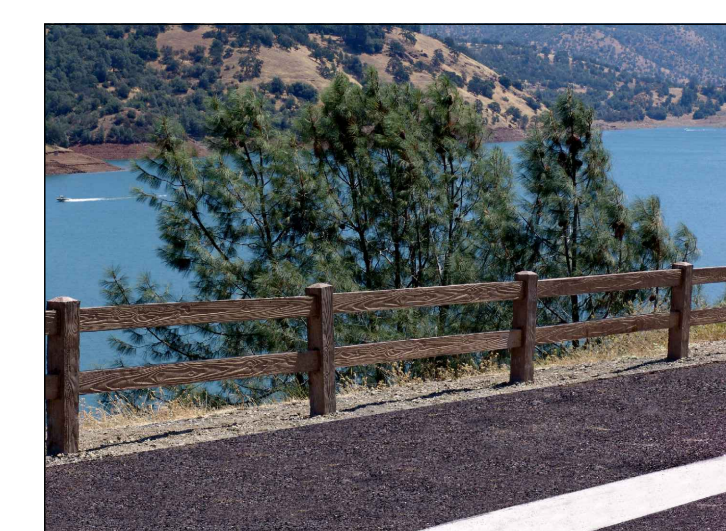
**ENVIRONMENTAL STONeworks:** Taupe Fieldstone



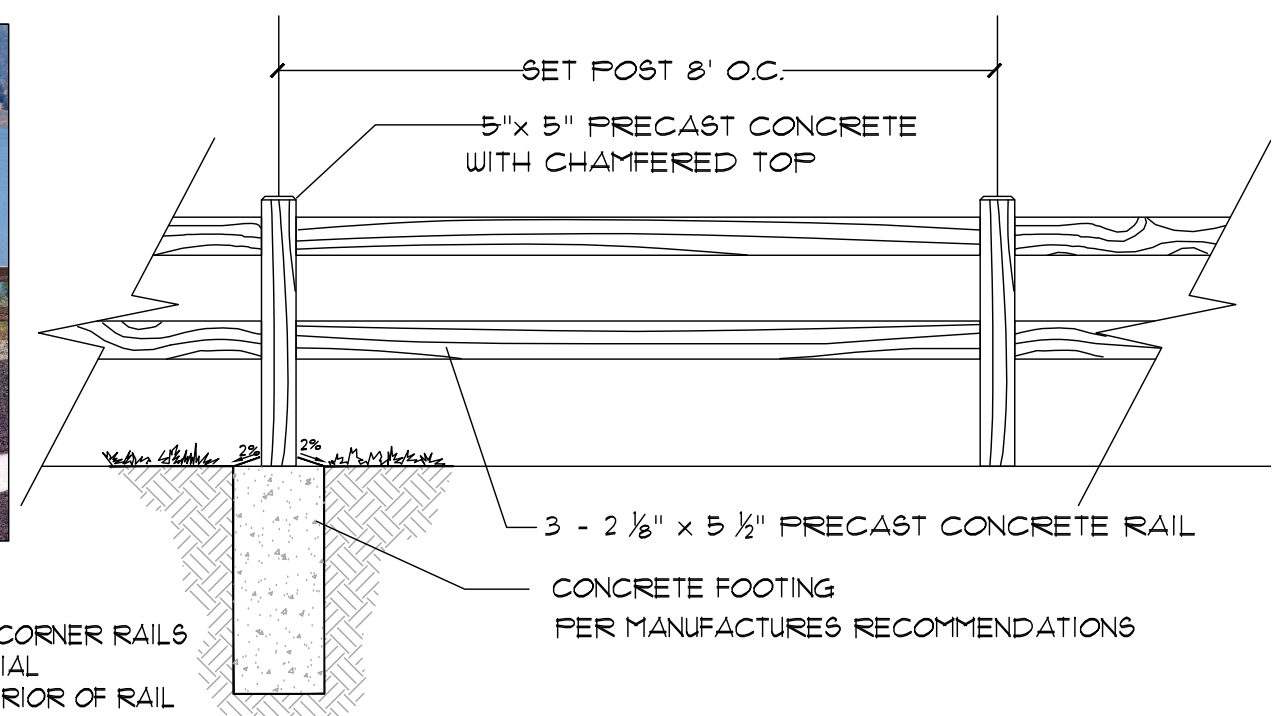


**LEGEND**

- WOOD FENCE
- OPEN RAIL FENCE
- COBBLE
- C3 PLANTING
- SPREADING GROUNDCOVER



- NOTES:**
- FENCE SYSTEM SHALL BE "WOODCRETE RAIL" OR APPROVED EQUIVALENT
  - POSTS AND RAILS SHALL HAVE EQUAL TEXTURE ON ALL SIDES.
  - EXPOSED ENDS OF RAILS SHALL BE SMOOTH/BEVELED.
  - SECURE END AND CORNER RAILS WITH CITY INDUSTRIAL ADHESIVE ON INTERIOR OF RAIL AT POST.
  - ALL RAILS SHALL BE SET LEVEL, WITH GRADE CHANGES OCCURRING AT EACH POST.

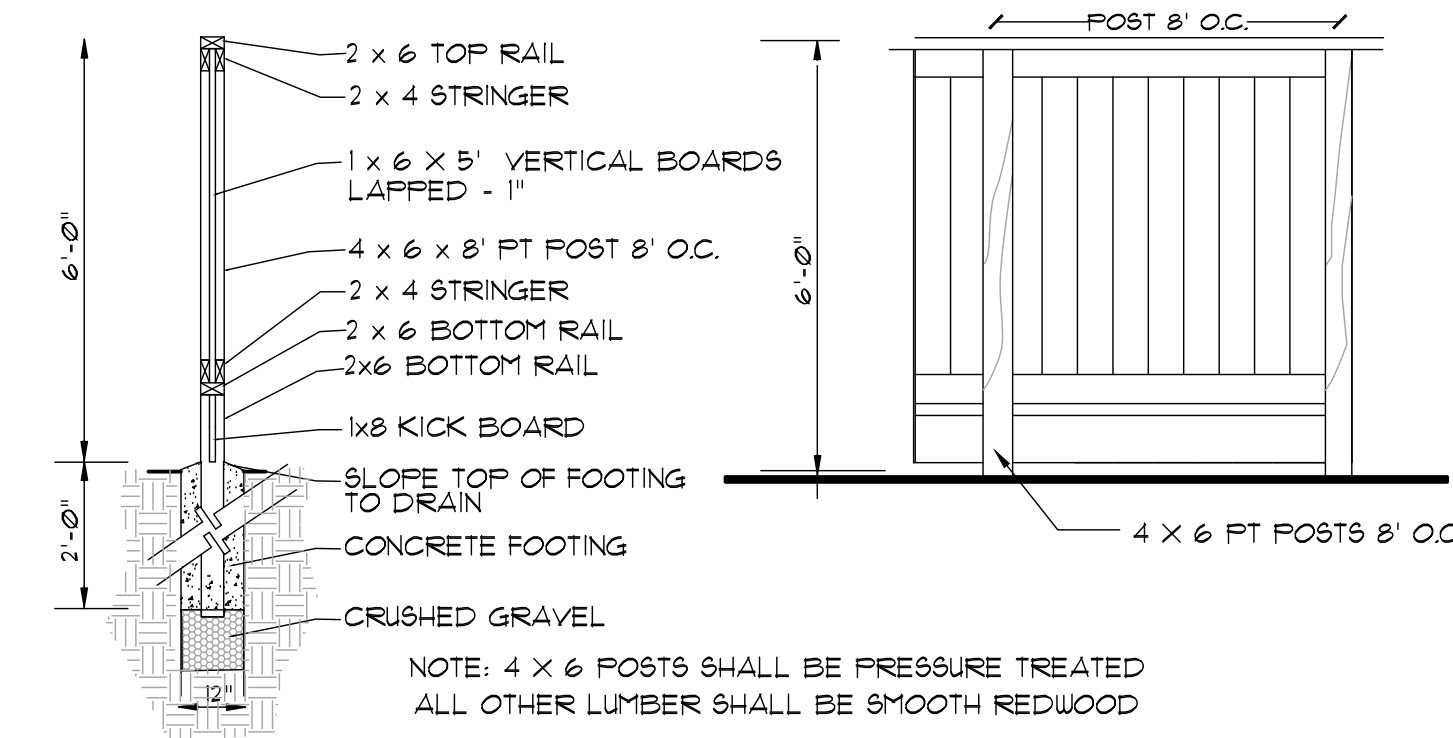


**OPEN RAIL FENCE**  
NO SCALE



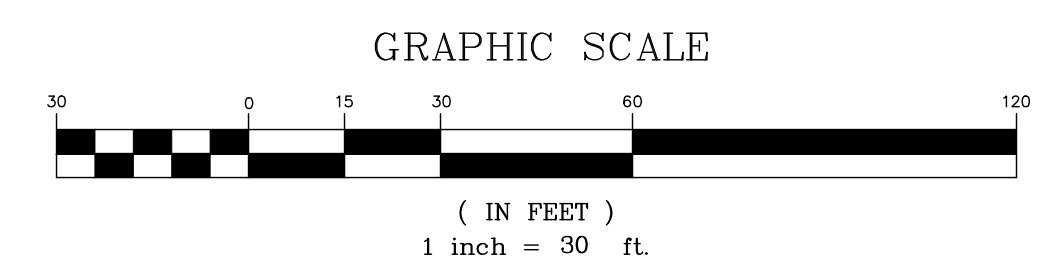
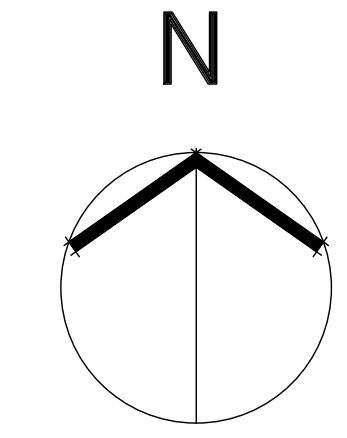
SUNBURST COBBLE 4" - 8" OR EQUAL  
COBBLE AVAILABLE FROM MORGENS MASONRY SUPPLY  
925-831-7296

**COBBLE**



NOTE: 4 x 6 POSTS SHALL BE PRESSURE TREATED  
ALL OTHER LUMBER SHALL BE SMOOTH REDWOOD  
**6' WOOD FENCE**  
NO SCALE

LANDSCAPE PLANS COMPLY WITH THE CRITERIA OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AB1881 AND THE CITY OF CLAYTON MUNICIPAL CODE 17.80 PLANS HAVE APPLIED SUCH CRITERIA FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN. WATER CALCULATIONS AND WELO DOCUMENTS SHALL BE SUBMITTED WITH THE CONSTRUCTION DRAWINGS



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**BORRECO/KILIAN & ASSOCIATES, INC.**  
LANDSCAPE ARCHITECTS  
1241 Pine Street  
Marina, California 94553  
Phone: 925/572-5306  
FAX: 925/572-5308

**RESISTANCE TO ROT AND INSECT DAMAGE**  
LANDSCAPE ARCHITECT  
EXPIRES 12/31/2020  
STATE OF CALIFORNIA

REV: \_\_\_\_\_ DATE: \_\_\_\_\_ DESCRIPTION: \_\_\_\_\_

TITLE OF PROJECT: **SUBDIVISION 9536**  
**DIABLO CANYON ROAD**

DATE: 4/18/20  
DRAWN BY: KDF  
PNS PLAN IS:

SHEET NUMBER: 1  
TITLE OF DRAWING: CONCEPT

\\Landscape\Borran\Drawings\Diablo Canyon\_LP.dwg, Apr. 29, 2020, 3:59pm, Administrator

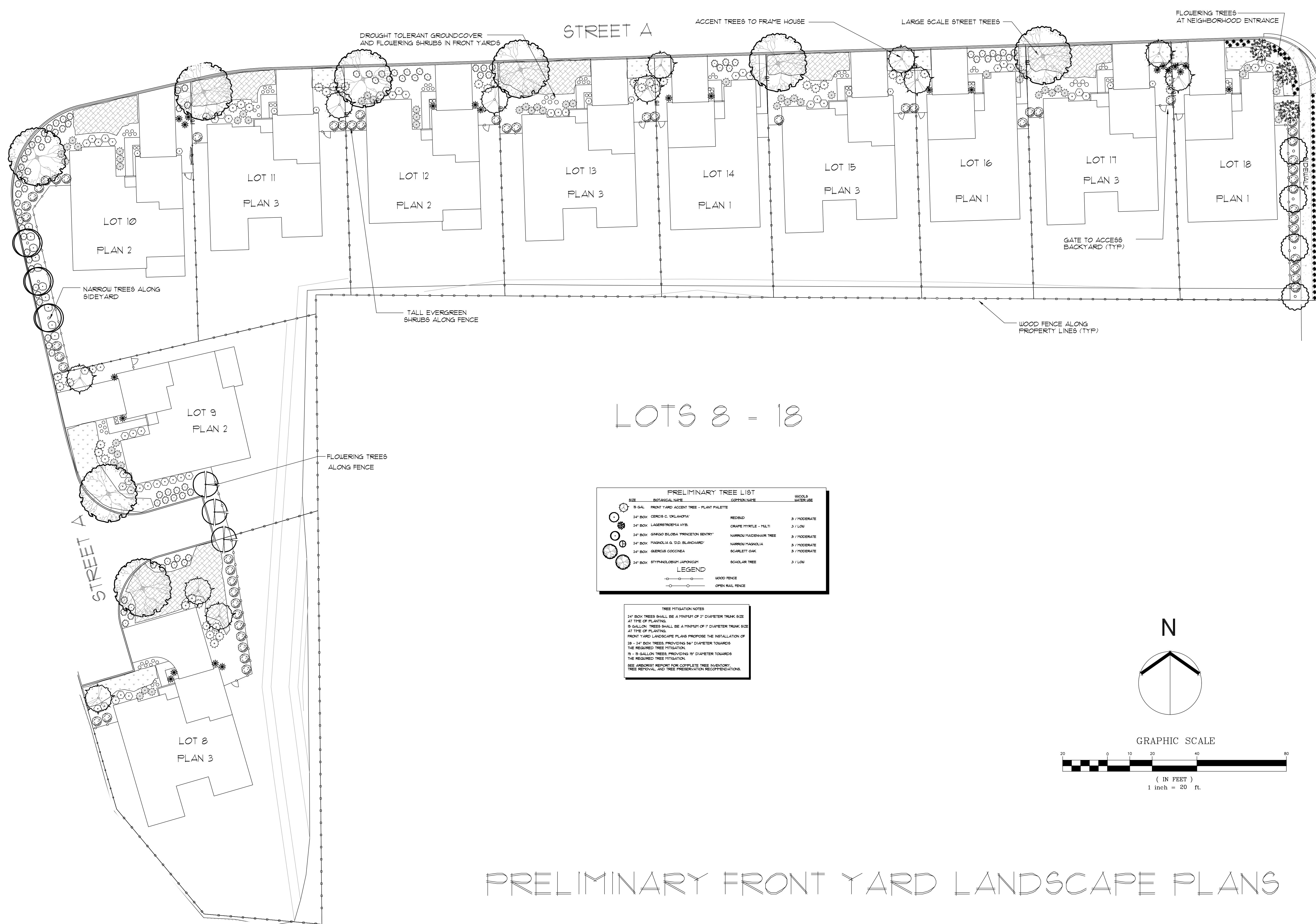
PRELIMINARY LANDSCAPE PLAN







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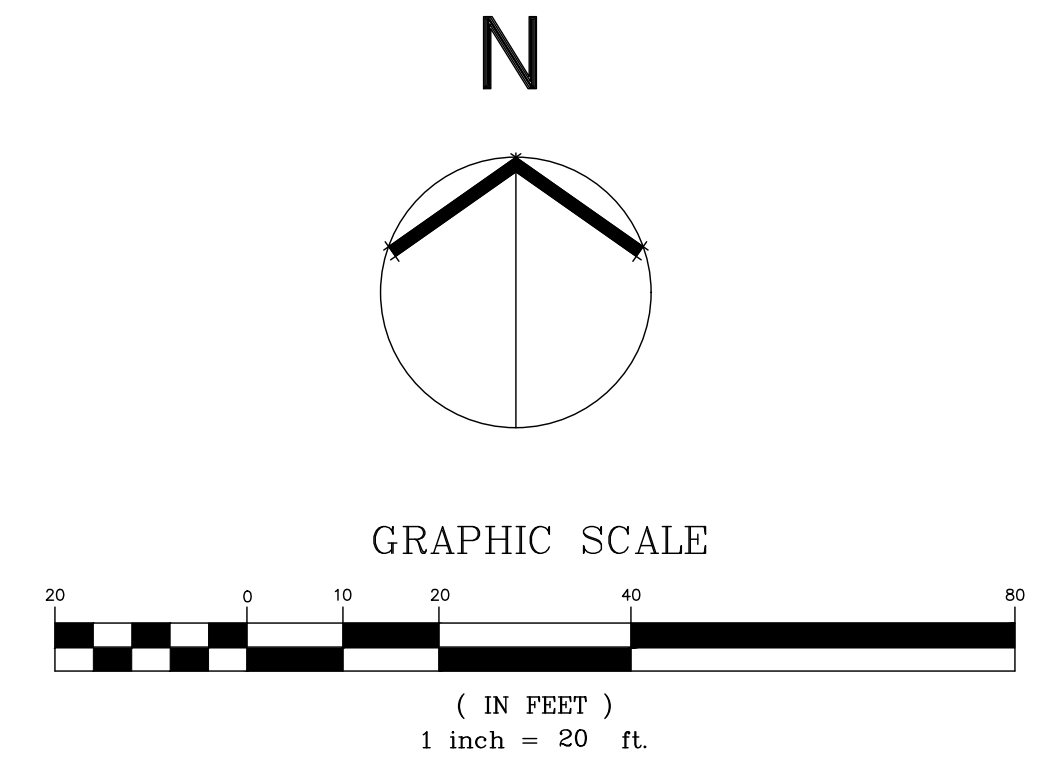


LOTS 8 - 18

SIZE	BOTANICAL NAME	COMMON NAME	MOOLS	WATER USE
8 GAL	FRONT YARD ACCENT TREE - PLANT PALETTE			
24" BOX	CERCIS G. OKLAHOMA	REDBUD	3	MODERATE
24" BOX	LASENDRIFTIA HYB.	CRANE HYDRLE - H&T	3	LOW
24" BOX	GRISGO BILOBA PRINCETON BENTY	NARROW/HAIR TREE	3	MODERATE
24" BOX	MAGNOLIA G. D.D. BLANCHARD	NARROW/MAGNOLIA	3	MODERATE
24" BOX	QUERCUS GONGORA	SCARLETT OAK	3	MODERATE
24" BOX	STYRACOCOSMUS JAPONICUS	SCHOLAR TREE	3	LOW

**LEGEND**  
 - - - - - WOOD FENCE  
 - - - - - OPEN RAIL FENCE

**TREE MITIGATION NOTES**  
 24" BOX TREES SHALL BE A MINIMUM OF 2" DIAMETER TRUNK SIZE AT TIME OF PLANTING.  
 8 GALLON TREES SHALL BE A MINIMUM OF 1" DIAMETER TRUNK SIZE AT TIME OF PLANTING.  
 FRONT YARD LANDSCAPE PLANS PROPOSE THE INSTALLATION OF 28 - 24" BOX TREES PROVIDING 84" DIAMETER TOWARDS THE REQUIRED TREE MITIGATION.  
 19 - 8 GALLON TREES PROVIDING 19" DIAMETER TOWARDS THE REQUIRED TREE MITIGATION.  
 SEE ARBORIST REPORT FOR COMPLETE TREE INVENTORY, TREE REMOVAL, AND TREE PRESERVATION RECOMMENDATIONS.



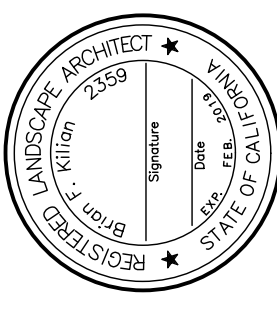
PRELIMINARY FRONT YARD LANDSCAPE PLANS

MITCHELL CANYON ROAD

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**BORRECCO/KILIAN & ASSOCIATES, INC.**  
**LANDSCAPE ARCHITECTS**  
 1241 Pine Street  
 Martinez, California 94553  
 Phone: 925/372-5306  
 FAX: 925/372-5308



REV	DATE	DESCRIPTION

TITLE OF PROJECT  
**SUBDIVISION 9536**  
**DIABLO CANYON ROAD**

DATE: 4/18/20  
 DRAWN BY: KDF  
 THIS PLAN IS:

SHEET NUMBER: 4  
 TITLE OF DRAWING:  
 CONCEPT



# TREES, BUGS, DIRT

LANDSCAPE CONSULTING & TRAINING

## ARBORIST REPORT

Diablo Canyon

*Mitchell Canyon Road, Clayton CA*



April 30, 2020

Prepared For: DeNova Homes  
1500 Willow Pass Court  
Concord CA 94520

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## SUMMARY

Fifty eight trees within and next to the proposed development are evaluated. Thirty six of the trees have their trunks located on the site, eighteen trees are on properties bordering the site, and four have trunks in between properties. Thirty nine of the trees evaluated are protected in the City of Clayton. Trunk diameters of all trees evaluated ranges from 47.5" to 3.8", averaging 15.7". Tree health, structural quality, and form ranges from very poor to excellent, averaging fair. Thirty seven trees are proposed for removal due to the project, 660.2 inches of cumulative tree diameter. Twenty one trees are proposed for preservation; one tree on the development site (#37), fifteen trees next to the site, & five trees in fences.

Establishment of fenced tree preservation zones next to fence lines with trees on the other side, and outside of the dripline of the tree to be preserved on site is recommended to prevent tree damage. Pruning to raise tree crowns and prevent damages to branches is also recommended for trees with crowns that spread over the fencelines. Air spade trenching and root pruning is recommended to minimize damages to tree roots. New landscaping beyond wood chip mulch shall not be installed within the dripline of tree #37, and not within five radial feet of tree trunks located offsite next to property lines. I recommend planting *Quercus agrifolia* (coast live oak), and *Quercus lobata* (valley oak) as mitigation trees in numbers and amounts that will equal 660.2 inches in diameter.

## INTRODUCTION

### PURPOSE AND USE

This report is intended to provide information for the Client and the City of Clayton as part of a development and tree removal permit process.

### ASSIGNMENT

I was hired by DeNova Homes (Client), to measure, map, tag, digitally image, inventory & evaluate trees at the development site of the Diablo Canyon property in Clayton CA, and to provide an Arborist Report that includes a summary of my observations, a tree location map, and other relevant information. Only trees within the area to be developed, and directly next to proposed development were evaluated.

### LIMITS OF ASSIGNMENT

- Trees were not evaluated below ground or aurally, nor were invasive or destructive methods used to assess tree health
- Trees located outside of the development area, in the proposed preserved open space were not evaluated

### BACKGROUND

When the City of Clayton requires an Arborist Report, it must be prepared by an International Society of Arboriculture Certified Arborist, who is independent of a tree removal company. Clayton also requires a tree removal permit prior to removal of trees six inches or greater in diameter. A tree replacement plan when required must include quantity, location, size and species of proposed replacement trees. The City of Clayton has designated protected trees as those that are of the following species found on site; *Quercus agrifolia*, *Q. douglasii*, *Q. lobata*, and *Juglans hindsii*.

## OBSERVATIONS

### LOCATION

The site is located between 835-895 Mitchell Canyon Road Clayton CA.

### SETTING

The site is vacant and relatively flat, with trees, grasses and herbaceous plants covering the ground. There is a shed at the western end of the building site. Soils on site are mapped as Perkins series, a very deep, well drained soil. Perkins soils typically are loam textured on top of clay loam. Most roots are found in the top two feet of this type of soil.

### METHODS

On January 23, 2020 I identified tree species, measured **trunk circumferences** at 4.5 feet above grade, tagged trunks, or noted already tagged trees with either numbered or lettered tags, located trees visually on a site plan, digitally imaged trees and assessed their **health, structural quality and form**. Trees with trunks not located on the site were measured when possible or their trunk diameter sizes were estimated if measurement was not possible. Subsequently I evaluated the local soil survey, soils report, and site plans, and provided recommendations for tree preservation that were incorporated in modified designs. Kerri Watt of DeNova homes provided fact-checking edits, along with a summary tree exhibit.

### Documents used:

- City of Clayton Municipal Code, Chapter 15.70 Tree Protection Ordinance
- Tree Assessment Plan, September 2019, Hort Science, Bartlett Consulting
- US Soil Survey, Standard Soil Series Descriptions, Oregon State University
- Preliminary Development Plan, C-5, Meridian Associates, Inc., March, 2020
- Preliminary Utility Plan, C-4, Meridian Associates, Inc., March, 2020
- Preliminary Grading and Drainage Plan, C-3, Meridian Associates, Inc., March, 2020

### Measurements & Calculations

- Trunk circumferences measured at 4.5 feet above grade, unless otherwise noted due to access problems
- Multiple trunks are combined, and reported as (cumulative) diameter
- Trunk circumferences divided by 3.14 to calculate diameter, and rounded off to one significant digit
- Trunk diameter estimates multiplied by 3.14 to calculate diameter, and rounded off to one significant digit
- Mitigation tree sizes were estimated using the WCISA Species Classification & Group Assignment Guide (2004 WCISA), and information published by local, regional, and state of CA nurseries including Jimenez Nursery, Big Trees Nursery, Specialty Oaks, Inc., Urban Tree Farm, and Devil Mountain Nursery.

### *More Methods*

#### Health Structure & Form Evaluation Standards

- +numerical rating system; zero (dead), one (very poor), two (poor), three (fair), four (good) and five (excellent)
  - + form assessed by rating specimens on their deviance from the norm for the species in this region, visual qualities such as attractiveness, and engineering functions such as screening, shading and creating views
  - +qualitative descriptions and items assessed for health & structure include
    - rooting zone - bare, mulched, limited space, weeds, competing vegetation, moisture, debris
    - root crown region (trunk & root junction) - buried, clear, pests, diseases, wet, wounds, cavities
    - trunk - taper, lack of taper, wounds, lean, growth cracks, stress cracks, pests, diseases, wounds
    - scaffold (large, major) branches - taper, distribution of branches, strength of branch connections, wounds, pests
    - smaller branches - distribution, size, amount, strength of connections, pests, diseases
    - twigs - annual growth, color, size, distribution, dead/live
    - foliage - color, size, distribution, pests, diseases, leaf fall
- 

#### DATA SUMMARY - See Appendix A for complete data set

- 58 trees were evaluated
    - 39 protected trees
    - 36 trees with trunks on the development site were assessed
    - 18 trees located directly adjacent to the site were assessed from one side of the fence only
    - 4 trees with trunks embedded in fences were evaluated from one side of the fence only
  - 11 species identified, one tree only identified to genus (ash - *Fraxinus*)
  - trunk diameter range from 47.5 inches to 3.8 inches, averaging 15.7 inches
- 

#### **RECOMMENDATIONS** - See Appendix B for complete data set & Appendix C for preservation details

#### TREES TO BE REMOVED & PRESERVED

- Twenty one trees will be preserved on and adjoining the site
  - One large, old protected blue oak tree (#37)
  - Fifteen trees bordering the site (C, D, E, F, G, H, I, J, K, L, M, N, O, P, 34)
  - Five additional trees with trunks embedded in a fence can be preserved if the new project fence is constructed five feet away from the embedded trunks (26, 27, 28, 29, 35)
- Thirty seven trees (34 protected) are recommended for removal

#### TREE PROTECTION ZONES

Trees growing within five feet of fence lines are vulnerable to significant root damage. A five foot tree protection zone is recommended from the fence lines north & south into the development area where no foot, vehicle, storage, or any other intrusion is allowed during all construction phases. Prior to installation of new landscaping and fencing along property lines, protected trees on property lines shall not be disturbed within that tree protection zone.

## NEW LANDSCAPING

- Landscaping around the protected oak (#37) on site shall be limited to mowing weeds, installing a layer of cardboard, and maintaining two inches of wood chip mulch on the soil surface.
- Fences on the northern and southern borders shall require absolutely no grading or digging within five radial feet of all protected tree trunks
- New trees shall be selected, installed, and maintained as per requirements of City of Clayton
- If a new fenceline is established for the property, rather than demolishing and reinstalling the existing fenceline, then four border trees can be preserved

## DAMAGE PREVENTION & MITIGATION *PRIOR TO ANY & ALL SITE WORK*

- root damage to be minimized as follows
  - air spade along property lines on north & south sides of site
  - prune all exposed roots using sharp sawzall blades
  - cover pruned roots with soil
- crown damage to be minimized either by pruning or tying branches back temporarily
  - raise crown as specified to allow for vehicle and equipment clearance
    - 16 feet above existing grade
    - maintain at least 50% live crown ratio
    - thinning cuts in the 2 inches in diameter and smaller range
    - remove all downward growing branches from zero to fifteen feet above grade
    - shorten branches larger than 2 inches in diameter by heading back to branches at least 1/2 their diameters
    - no more than 25% of crown to be removed in one season

## MITIGATION TREES

- Species; *Quercus agrifolia* (coast live oak) and *Q. lobata* (valley oak)
- Total of planted tree diameters should equal 660.2 inches in cumulative diameter



**APPENDIX A - DATA**

#	Name	Species	Trunk Circumference (inches)	Trunk Diameter (inches)	Protected	Health	Structure	Form	Notes	Trunk on Site
1	valley oak	<i>Quercus lobata</i>	34,30.5	20.5	YES	fair	poor	poor	Rooting zone limited, root crown buried, trunks leaning, unbalanced	YES
2	valley oak	<i>Quercus lobata</i>	34.0	10.8	YES	fair	fair	poor	Rooting zone limited, root crown not clear, codominant high trunks with included bark	YES
3	valley oak	<i>Quercus lobata</i>	43.0	13.7	YES	poor	fair	poor	Measured at 4'. Rooting zone limited, root crown not clear, multiple scaffolds well pruned under power lines, stunted twig growth	YES
4	valley oak	<i>Quercus lobata</i>	48,64	35.7	YES	fair	fair	fair	Codominant trunks with included bark	YES
5	valley oak	<i>Quercus lobata</i>	34,53	24.5	YES	fair	poor	poor	Rooting zone limited, root crown not clear, leaning trunk, scaffolds topped	YES
6	valley oak	<i>Quercus lobata</i>	18.5,24.5	13.7	YES	fair	fair	poor	Rooting zone limited, root crown not clear, multiple trunks with included bark, upright form	YES
7	valley oak	<i>Quercus lobata</i>	41.0	13.1	YES	fair	good	good	Rooting zone limited, root crown not clear, excellent balance & branch distribution	YES

#	Name	Species	Trunk Circumference (inches)	Trunk Diameter (inches)	Protected	Health	Structure	Form	Notes	Trunk on Site
8	valley oak	<i>Quercus lobata</i>	88.0	28.0	YES	good	fair	good	Root crown clear, codominant trunks with included bark	YES
9	valley oak	<i>Quercus lobata</i>	19.0	6.1	YES	poor	poor	poor	Stunted	YES
10	Monte rey pine	<i>Pinus radiata</i>	94.2	30.0	NO	fair	fair	poor	TRUNK OFFSITE. Diameter estimated, rooting zone limited, 1/3 tree deformed, unbalanced, stubbed back for utility line clearance	NO
11	valley oak	<i>Quercus lobata</i>	26.5	8.4	YES	fair	fair	fair	Next to fence	YES
12	almond	<i>Prunus dulcis</i>	14.5,15,14.5,9,3	17.8	NO	poor	poor	poor	Circumference at 12" = 26,17. Trunk leaning, stunted	YES
13	valley oak	<i>Quercus lobata</i>	39.5	12.6	YES	fair	good	fair	Next to fence	YES
14	Ca black walnut	<i>Juglans hindsii</i>	30,35,84	47.5	YES	very poor	very poor	very poor	Only 6 1-2" diameter stump sprouts alive	YES
15	valley oak	<i>Quercus lobata</i>	25.5,16	13.2	YES	fair	fair	fair		YES
16	valley oak	<i>Quercus lobata</i>	28.0	8.9	YES	fair	poor	poor	Unbalanced from old topping, recovered	YES

#	Name	Species	Trunk Circumference (inches)	Trunk Diameter (inches)	Protected	Health	Structure	Form	Notes	Trunk on Site
17	valley oak	<i>Quercus lobata</i>	118.0	37.6	YES	good	good	excellent	Oozing trunk wound, indented trunk under scaffold, multiple trunks with included bark , raccoon latrine in main crotch	YES
18	coast live oak	<i>Quercus agrifolia</i>	12,15,20	15.0	YES	excellent	fair	fair	Codominant trunks with included bark , root crown buried	YES
19	Ca black walnut	<i>Juglans hindsii</i>	23.0	7.3	YES	fair	poor	fair	Stump sprout	YES
20	valley oak	<i>Quercus lobata</i>	21.5,11,11	13.9	YES	fair	poor	poor	Severe pit scale infestation, codominant trunks & scaffolds with included bark	YES
21	valley oak	<i>Quercus lobata</i>	24.0	7.6	YES	fair	poor	poor	Twisted leaning trunk	YES
22	valley oak	<i>Quercus lobata</i>	26,26,20,9	25.2	YES	fair	poor	fair	Stump sprout	YES
23	valley oak	<i>Quercus lobata</i>	30.5,13	13.2	YES	fair	fair	fair	Codominant trunks with included bark narrow form	YES
24	valley oak	<i>Quercus lobata</i>	22,26.5	15.4	YES	fair	fair	fair	Codominant trunks with included bark	YES
25	valley oak	<i>Quercus lobata</i>	42,20	19.7	YES	fair	fair	good	Stump sprout	YES
26	valley oak	<i>Quercus lobata</i>	29.0	9.2	YES	fair	poor	poor	Embedded in fence, trunk leaning towards property	bee - tween

#	Name	Species	Trunk Circumference (inches)	Trunk Diameter (inches)	Protected	Health	Structure	Form	Notes	Trunk on Site
27	valley oak	<i>Quercus lobata</i>	36.0	11.5	YES	good	poor	poor	Embedded in fence, trunk leaning towards property	bee - tween
28	valley oak	<i>Quercus lobata</i>	18.0	5.7	YES	fair	poor	poor	Trunk through fence embedded, growth into property	bee - tween
29	valley oak	<i>Quercus lobata</i>	34.0	10.8	YES	fair	poor	fair	Trunk through fence embedded, growth into property	bee - tween
30	coast live oak	<i>Quercus agrifolia</i>	42.5	13.5	YES	excellent	good	good	Near power pole, next to fence , trunk leaning	YES
31	almond	<i>Prunus dulcis</i>	14,21,13,15,3,6	22.9	NO	good	poor	good	Codominant trunks	YES
32	coast live oak	<i>Quercus agrifolia</i>	24.0	7.6	YES	fair	poor	poor	Suppressed by large dead Ca black walnut , codominant trunks with included bark	YES
33	valley oak	<i>Quercus lobata</i>	52.0	16.6	YES	fair	poor	fair	Mistletoe x2, codominant trunks, large trunk wound	YES
34	olive	<i>Olea europaea</i>	36,9,9,9,15,9	28.7	NO	excellent	poor	good	TRUNK OFFSITE. New tag, 3' from fence, branches 15' into property , multiple trunks	NO
35	olive	<i>Olea europaea</i>	30,9,9,6,7,9	22.3	NO	good	poor	fair	TRUNK OFFSITE. 1 foot from fence, growing through fence, multiple trunks	NO

#	Name	Species	Trunk Circumference (inches)	Trunk Diameter (inches)	Protected	Health	Structure	Form	Notes	Trunk on Site
36	valley oak	<i>Quercus lobata</i>	25.0	8.0	YES	poor	fair	poor	Stunted	YES
37	blue oak	<i>Quercus douglasii</i>	124.0	39.5	YES	fair	good	excellent		YES
38	coast live oak	<i>Quercus agrifolia</i>	46.0	14.6	YES	good	fair	excellent	Codominant trunks with included bark	YES
84	valley oak	<i>Quercus lobata</i>	44.0	14.0	YES	fair	fair	fair	size & species extrapolated from photo	YES
85	ash	<i>Fraxinus spp.</i>	84,31	36.6	NO	poor	poor	fair	Root crown not clear, multiple trunks with included bark, mistletoe profuse, stunted	YES
86	coast live oak	<i>Quercus agrifolia</i>	23,16,16	17.5	YES	excellent	fair	good	Fence splitting trunk	YES
87	valley oak	<i>Quercus lobata</i>	80.0	25.5	YES	poor	good	good	Profuse mistletoe, low branches	YES
A	coast live oak	<i>Quercus agrifolia</i>	20,9,9,4,3	14.3	YES	good	poor	poor	Growing into fence	YES
B	plum	<i>Prunus spp.</i>	30.0	9.6	NO	poor	poor	poor	Trunk at 12", at 4.5' diameter = 3", 3.5,3.5,2.5,2.5,3.5, 3	NO
C	coast redwood	<i>Sequoia sempervirens</i>	18.8	6	NO	good	fair	fair	TRUNK OFFSITE. 30" from fence, girdling root	NO

#	Name	Species	Trunk Circumference (inches)	Trunk Diameter (inches)	Protected	Health	Structure	Form	Notes	Trunk on Site
D	coast redwood	<i>Sequoia sempervirens</i>	31.4	10	NO	good	good	good	TRUNK OFFSITE. 30" from fence	NO
E	coast redwood	<i>Sequoia sempervirens</i>	31.4	10	NO	good	good	good	TRUNK OFFSITE. 30" from fence	NO
F	coast redwood	<i>Sequoia sempervirens</i>	37.7	12	NO	good	good	good	TRUNK OFFSITE. 30" from fence, ivy up trunk	NO
G	coast redwood	<i>Sequoia sempervirens</i>	37.7	12	NO	good	good	good	TRUNK OFFSITE. 30" from fence	NO
H	coast redwood	<i>Sequoia sempervirens</i>	37.7	12	NO	good	good	good	TRUNK OFFSITE. 30" from fence	NO
I	coast redwood	<i>Sequoia sempervirens</i>	25.1	8	NO	good	good	good	TRUNK OFFSITE. 30" from fence	NO
J	coast redwood	<i>Sequoia sempervirens</i>	44.0	14	NO	good	good	good	TRUNK OFFSITE 26" from fence, ivy up trunk	NO
K	coast redwood	<i>Sequoia sempervirens</i>	40.8	13	NO	excellent	good	good	TRUNK OFFSITE. 30" from fence	NO
L	coast redwood	<i>Sequoia sempervirens</i>	34.5	11	NO	fair	good	good	TRUNK OFFSITE. 30" from fence	NO
M	blue oak	<i>Quercus douglasii</i>	21.5	6.8	YES	good	fair	fair	Growing through fence	NO

#	Name	Species	Trunk Circumference (inches)	Trunk Diameter (inches)	Protected	Health	Structure	Form	Notes	Trunk on Site
N	Aleppo pine	<i>Pinus halepensis</i>	38.0	12.1	NO	good	good	fair	TRUNK OFFSITE. 5' from fence, branches 15' into property	NO
O	Aleppo pine	<i>Pinus halepensis</i>	12.0	3.8	NO	fair	fair	fair	TRUNK OFFSITE. 6' from fence, branches 9' over, trunk leaning	NO
P	Ca pepper-tree	<i>Schinus molle</i>	30.0	9.6	NO	good	fair	fair	TRUNK OFFSITE. 2' from fence growing 9' onto property	NO

**APPENDIX B - RECOMMENDATIONS**

#	Name	<i>PROTECTED</i>	Trunk Diameter (inches)	REMOVE	Prune Roots & Crown	Tree Protection Zone
1	valley oak	YES	20.5	yes	-	-
2	valley oak	YES	10.8	yes	-	-
3	valley oak	YES	13.7	yes	-	-
4	valley oak	YES	35.7	yes	-	-
5	valley oak	YES	24.5	yes	-	-
6	valley oak	YES	13.7	yes	-	-
7	valley oak	YES	13.1	yes	-	-
8	valley oak	YES	28.0	yes	-	-
9	valley oak	YES	6.1	yes	-	-
10	Monterey pine	NO	30.0	yes	-	-
11	valley oak	YES	8.4	yes	-	-
12	almond	NO	17.8	yes	-	-
13	valley oak	YES	12.6	yes	-	-
14	Ca black walnut	YES	47.5	yes	-	-
15	valley oak	YES	13.2	yes	-	-
16	valley oak	YES	8.9	yes	-	-
17	valley oak	YES	37.6	yes	-	-
18	coast live oak	YES	15.0	yes	-	-

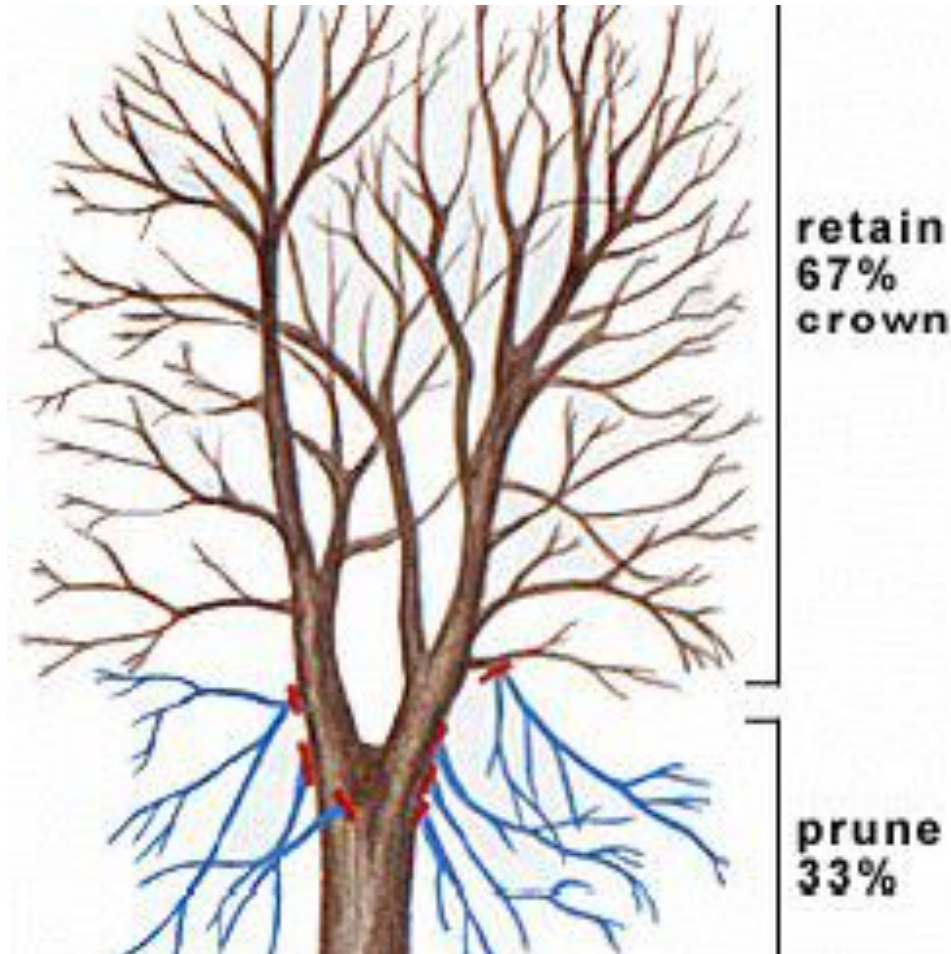


#	Name	PROTECTED	Trunk Diameter (inches)	REMOVE	Prune Roots & Crown	Tree Protection Zone
19	Ca black walnut	YES	7.3	yes	-	-
20	valley oak	YES	13.9	yes	-	-
21	valley oak	YES	7.6	yes	-	-
22	valley oak	YES	25.2	yes	-	-
23	valley oak	YES	13.2	yes	-	-
24	valley oak	YES	15.4	yes	-	-
25	valley oak	YES	19.7	yes	-	-
26	valley oak	YES	9.2	no if x2 fence	-	-
27	valley oak	YES	11.5	no if x2 fence	-	-
28	valley oak	YES	5.7	no if x2 fence	-	-
29	valley oak	YES	10.8	no if x2 fence	-	-
30	coast live oak	YES	13.5	yes	-	-
31	almond	NO	22.9	yes	-	-
32	coast live oak	YES	7.6	yes	-	-
33	valley oak	YES	16.6	yes	-	-
34	olive	NO	28.7	no	+	yes
35	olive	NO	22.3	no if x2 fence	-	-
36	valley oak	YES	8.0	yes	-	-
37	blue oak	YES	39.5	no	+	yes
38	coast live oak	YES	14.6	yes	-	-
84	valley oak	YES	14.0	yes	-	-
85	ash	NO	36.6	yes	-	-
86	coast live oak	YES	17.5	yes	+	yes
87	valley oak	YES	25.5	yes	-	-

#	Name	<i>PROTECTED</i>	Trunk Diameter (inches)	REMOVE	Prune Roots & Crown	Tree Protection Zone
A	coast live oak	YES	14.3	yes	+	yes
B	plum	NO	9.6	yes	+	yes
C	coast redwood	NO	6	no	+	yes
D	coast redwood	NO	10	no	+	yes
E	coast redwood	NO	10	no	+	yes
F	coast redwood	NO	12	no	+	yes
G	coast redwood	NO	12	no	+	yes
H	coast redwood	NO	12	no	+	yes
I	coast redwood	NO	8	no	+	yes
J	coast redwood	NO	14	no	+	yes
K	coast redwood	NO	13	no	+	yes
L	coast redwood	NO	11	no	+	yes
M	blue oak	YES	6.8	no	+	yes
N	Aleppo pine	NO	12.1	no	+	yes
O	Aleppo pine	NO	3.8	no	+	yes
P	Ca peppertree	NO	9.6	no	+	yes

## APPENDIX C - PRESERVATION DETAILS

### 1) CROWN RAISING DETAIL



### RAISE

*“Pruning to provide vertical clearance.” American National Standard ANSI A300 (Part 1)-2008.  
Removal of the lower branches of a tree to provide clearance, fire safety or to increase aesthetic quality.*

### SPECIFICATIONS

- ❖ Clearance:
  - Three to six foot clearance from vegetated ground
  - Five to Six foot foot clearance from walls, gutters, roofs and lights
  - Fourteen foot clearance above all areas to be graded
- ❖ Size of cuts: small diameter cuts are preferred, in the range of one to three inches
- ❖ Type of cuts: thinning or proper reduction cuts only, unless approved ahead of time
- ❖ Balance: aesthetic and structural balance shall be maintained at all times

## 2) AIR SPADING & ROOT PRUNING



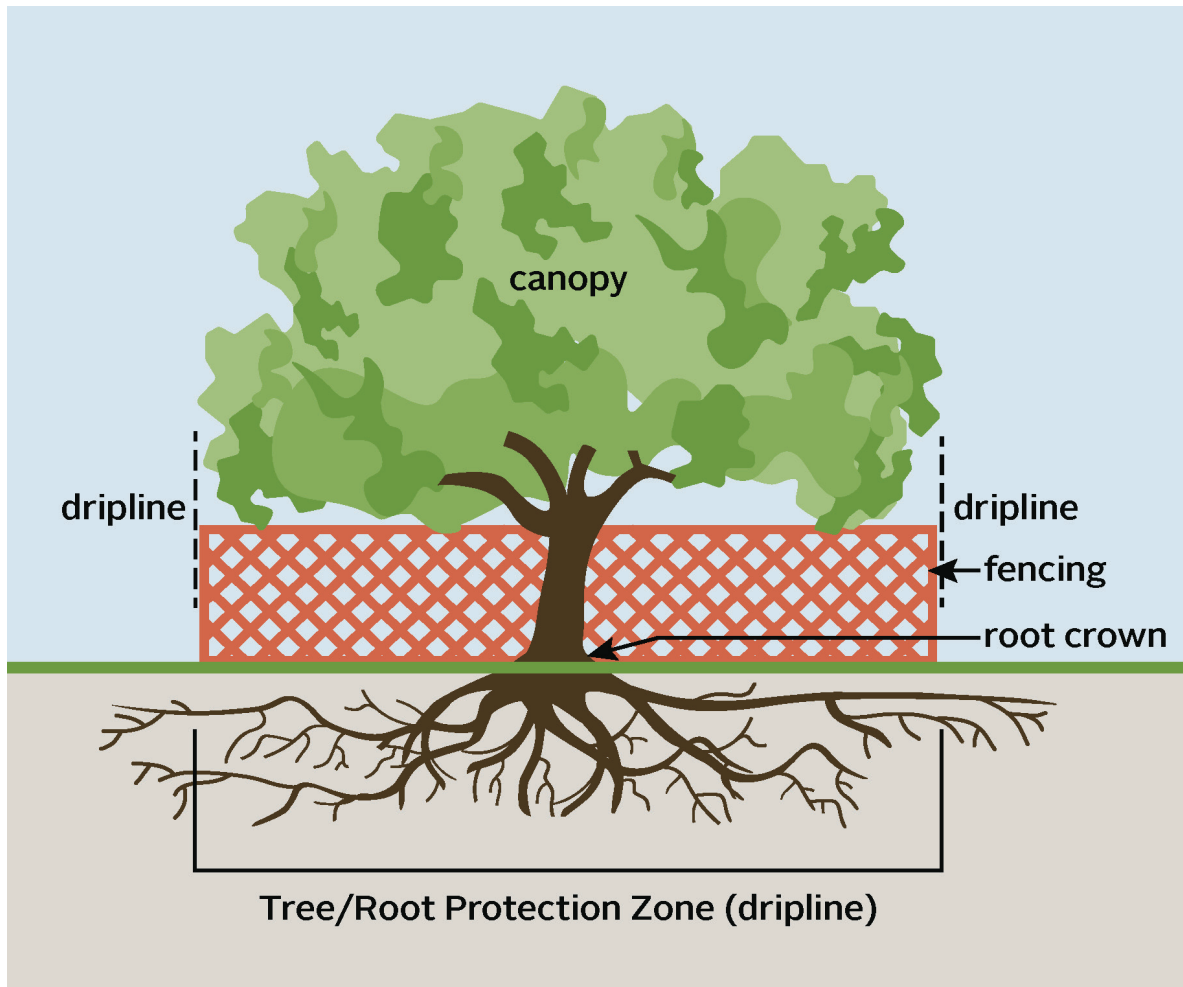
roots exposed by blowing away soil = air spading

**ROOT EXPOSURE & PRUNING:** Exposed & cut roots cleanly prior to work near tree to minimize damage to remaining roots and reduce the risk of causing disease, decay and instability.

### **SPECIFICATION**

- Expose roots along outside edge of 5 foot fenceline setback with air spade or other tool that uses compressed air
- Sharply cut completely and cleanly through all roots
- Use reciprocating saw with sharp blades or circular saws of varying types and/or a rotary-type stump grinder
- Saw blades or grinder teeth should be sharpened prior to use, and sharpness maintained
- Unless immediately backfilled after pruning, as a temporary measure, place burlap material and/or spread mulch over exposed roots after cuts are made and before soil is replaced. Keep this material damp until backfilled to prevent the fine roots from drying and dying
- Since root pruning occurs along or behind the line of planned construction, it should be coordinated with the tree protection fencing

### 3) TREE PROTECTION ZONE (TPZ) DETAIL



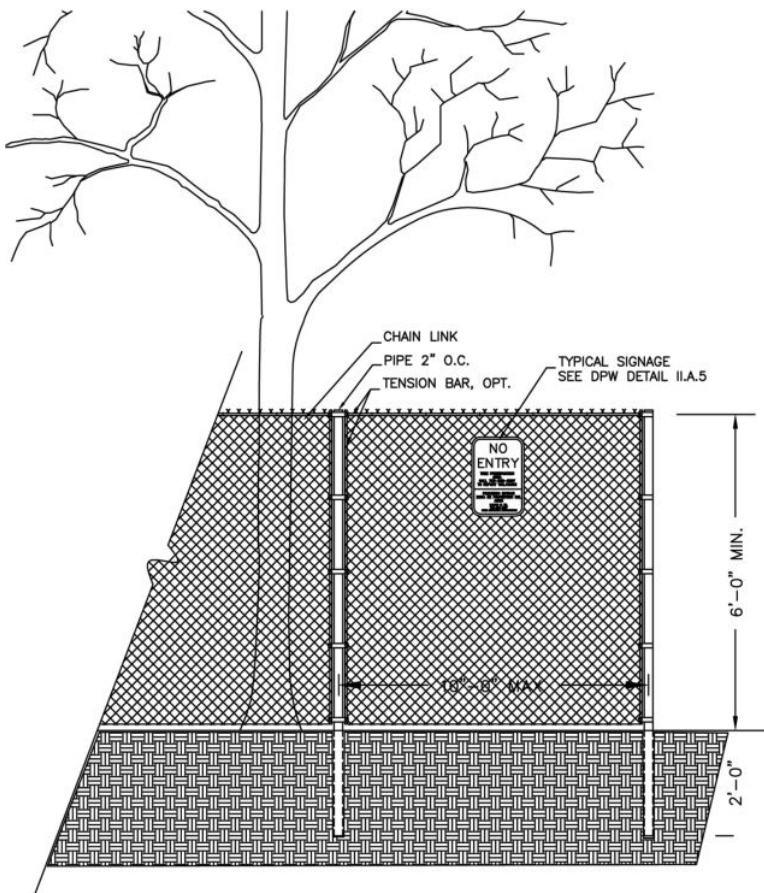
#### Permitted Within TPZ

- Mulching – should be used during construction to protect the soil from compaction, conserve soil moisture, and moderate soil temperature. Spread wood chips to a depth of 4 (four) inches, leaving the trunk clear of mulch.
- Irrigation, aeration, or other beneficial practices that have been specifically approved for use by the Project Consulting Arborist

#### Prohibited Within TPZ

- Storage of construction materials, debris, or excavated material.
- Parking vehicles or equipment.
- Foot traffic.
- Erection of sheds or structures.
- Drainage changes or impoundment of water.
- Cutting tree roots by utility trenching, foundation digging, placement of curbs, trenches and other miscellaneous excavation or other digging.
- Soil disturbance, soil compaction or grade change.
- Washout activities

#### 4) FENCING DETAIL



#### SPECIFICATION

- Tree protection fence is required along the edge of all Tree Protection Zones; outside of dripline for tree #37, outside of five foot property line setback for northern & southern borders
- Orange vinyl construction fencing, snow fencing or other similar fencing should be at least 4 feet high and supported at a maximum of 10 foot intervals by metal T-posts or approved methods sufficient enough to keep the fence upright and in place. T-posts shall be a minimum of 2 feet in the ground. Wooden stakes and rebar posts are not considered as an approved method sufficient enough to keep the fence upright and in place.
- Chain link fence shall be 6 feet tall with 2 inch mesh chain link fabric. 2 inch posts shall be tied with 6 gauge aluminum wire ties at 24 inch on center. Posts shall be a minimum of 2 feet in the ground and spaced at a maximum of 10 feet on center. Plastic zip-ties may not be used.

## APPENDIX D - GLOSSARY

**dripline** - region underneath tree canopy

**form** - genetically determined appearance that includes spread, height & configuration

**health** - tree growth as expressed by foliage, twigs, branches & trunks including resistance to pests

**root crown** – region where trunk and root system meet, also called `buttress' or `butt'

**rooting zone** – area where roots are likely to survive, beginning at the trunk and extending up to three times the radius of a tree's dripline region

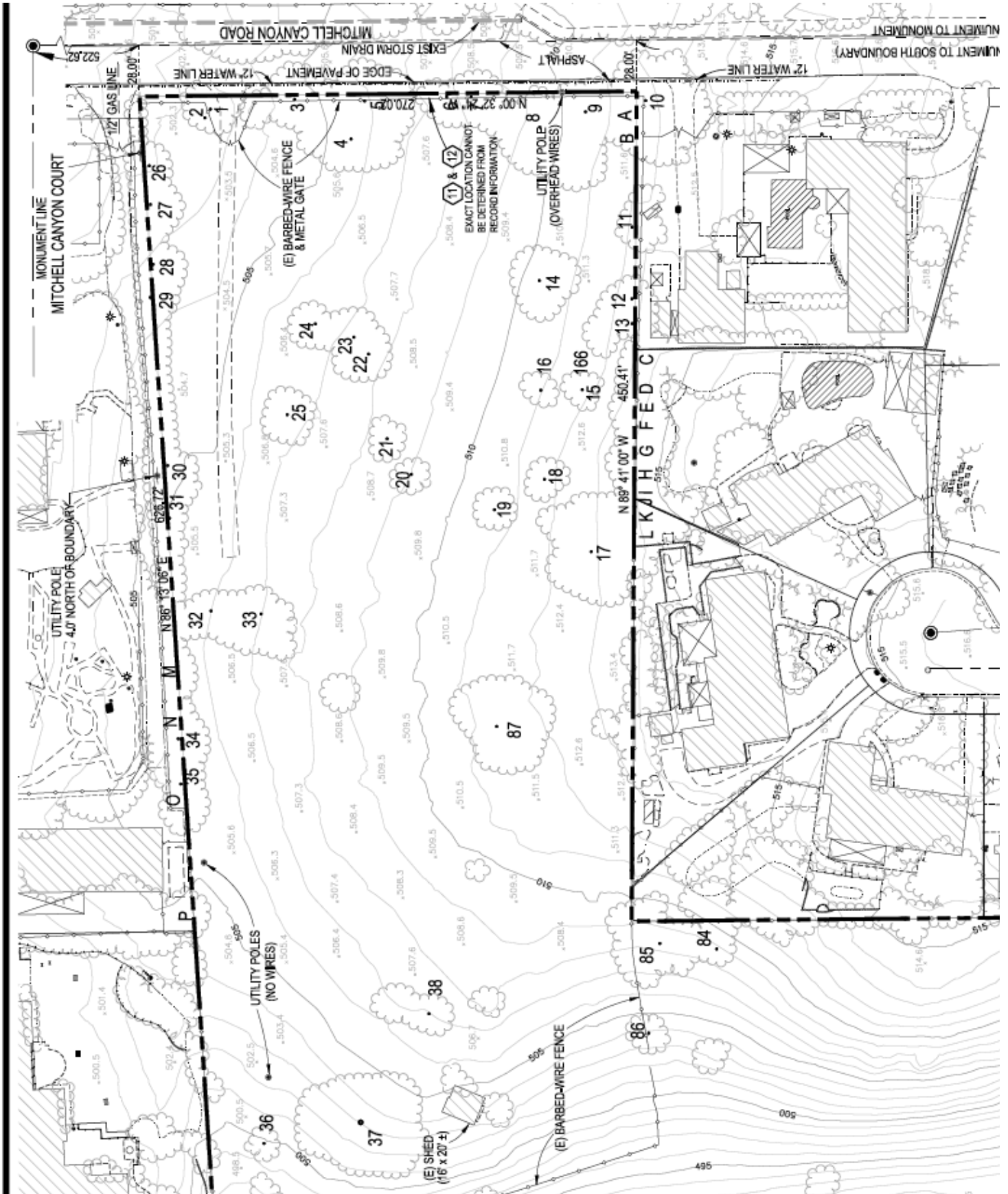
**scaffold** – large, structural branch

**structure** - physical and mechanical qualities of tree

**trunk circumference** – measurement of trunk, distance around

**trunk diameter** - trunk circumference divided by 3.14

APPENDIX E - TREE LOCATION MAP ALSO AVAILABLE AS PDF FILE





## APPENDIX F - CERTIFICATE OF PERFORMANCE

I, Michael Baefsky certify:

- That I have reviewed the The City of Clayton Municipal Code, Chapter 15.70 Tree Protection
- That I have evaluated the subject trees, and stated my findings accurately. The extent of the evaluation is stated in the attached report;
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions, and conclusions stated herein are my own;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted professional practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

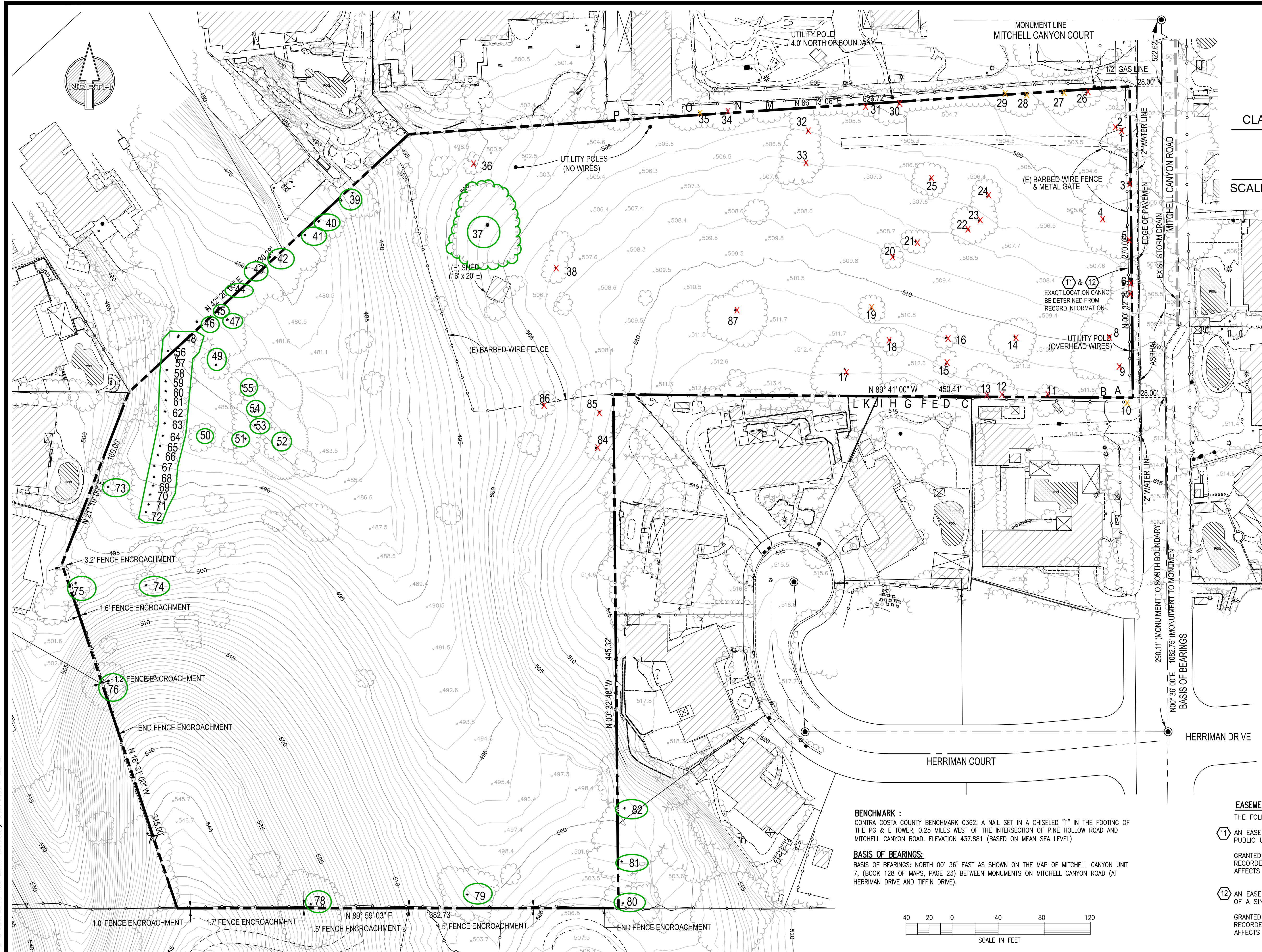
I certify that I am Registered Consulting Arborist #456, a member of the American Society of Consulting Arborists, and am Certified Arborist & Qualified Risk Assessor #WE0222A, Agricultural Pest Control Advisor #074617, Qualified Applicator #99864, Licensed Landscape Contractor (inactive) #931410, and have been involved in the practice of Arboriculture, Integrated Pest Management, Plant Health Care and Ecological Soils Management, and the study of soils and horticulture for over thirty years.

# MITCHELL CANYON ROAD

CLAYTON CONTRA COSTA COUNTY CALIFORNIA

SCALE: AS SHOWN

MARCH, 2020



### LEGEND & ABBREVIATIONS

	PROPERTY BOUNDARY		FOUND STANDARD CITY STREET MONUMENT
	RIGHT OF WAY		FOUND SURVEY MONUMENT AS NOTED
	EASEMENT		MANHOLE (TYPE AS NOTED)
	STORM DRAIN LINE		CATCH BASIN (ADJACENT TO MANHOLE TYPICAL)
	SEWER LINE		CATCH BASIN(S)
	FOUND STANDARD CITY STREET MONUMENT		WATER VALVE
	FOUND SURVEY MONUMENT AS NOTED		STREET LIGHT (PRIVATE)
	MANHOLE (TYPE AS NOTED)		STREET LIGHT (PUBLIC)
	CATCH BASIN (ADJACENT TO MANHOLE TYPICAL)		UTILITY BOX/VAULT (TYPE AS NOTED)
	CATCH BASIN(S)		TREE TRUNK LOCATION & NUMBER (SEE ARBORIST REPORT)
	WATER VALVE		SIGN
	STREET LIGHT (PRIVATE)		BFP BACKFLOW PREVENTER
	STREET LIGHT (PUBLIC)		C CONCRETE
	UTILITY BOX/VAULT (TYPE AS NOTED)		CB CATCH BASIN (STORM DRAIN INLET)
	TREE TRUNK LOCATION & NUMBER (SEE ARBORIST REPORT)		CO CLEANOUT
	SIGN		DWY DRIVEWAY
			E ELECTRICAL (PG&E)
			(E) EXISTING
			F FIRE (WATER) SERVICE LINE
			FDC FIRE DEPARTMENT CONNECTION
			FH FIRE HYDRANT
			G GAS
			GV GAS VALVE
			JP POWER POLE (JOINT SERVICE)
			SD STORM DRAIN
			SDMH STORM DRAIN MANHOLE
			SF SQUARE FEET
			SL STREET LIGHT
			SS SANITARY SEWER
			SSMH SANITARY SEWER MANHOLE
			T TELEPHONE (COMMUNICATIONS, SBC, PG&E)
			W WATER MAIN
			WM WATER METER
			WV WATER VALVE

**BENCHMARK :**  
 CONTRA COSTA COUNTY BENCHMARK 0362: A NAIL SET IN A CHISELED "T" IN THE FOOTING OF THE PG & E TOWER, 0.25 MILES WEST OF THE INTERSECTION OF PINE HOLLOW ROAD AND MITCHELL CANYON ROAD. ELEVATION 437.881 (BASED ON MEAN SEA LEVEL)

**BASIS OF BEARINGS:**  
 BASIS OF BEARINGS: NORTH 00° 36' EAST AS SHOWN ON THE MAP OF MITCHELL CANYON UNIT 7, (BOOK 128 OF MAPS, PAGE 23) BETWEEN MONUMENTS ON MITCHELL CANYON ROAD (AT HERRIMAN DRIVE AND TIFFIN DRIVE).

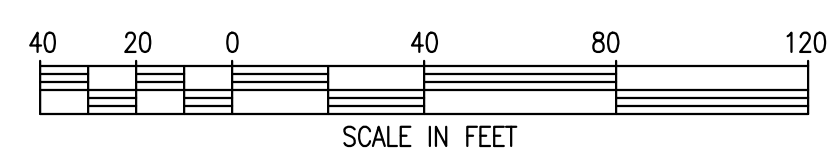
**EASEMENTS** (NUMBERING AND LANGUAGE CORRESPONDS WITH THE TITLE REPORT)  
 THE FOLLOWING EASEMENTS AFFECT PARCEL 1:

**11** AN EASEMENT FOR CONSTRUCTION, INSTALLATION, MAINTENANCE, REPAIR AND OPERATION OF PUBLIC UTILITIES AND INCIDENTAL PURPOSES.

GRANTED TO : PACIFIC TELEPHONE AND TELEGRAPH COMPANY  
 RECORDED : SEPTEMBER 16, 1914 IN BOOK 227 OF DEEDS, PAGE 283  
 AFFECTS : THE NORTHWEST 1/4 OF SECTION 14 (DESCRIBES THE WHOLE PROPERTY; EXISTING LINES ARE LOCATED ALONG THE MITCHELL CANYON ROAD RIGHT OF WAY)

**12** AN EASEMENT FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, REPAIR AND OPERATION OF A SINGLE LINE OF POLES, TELEPHONE AND TELEGRAPH LINES AND INCIDENTAL PURPOSES.

GRANTED TO : VALLEY PIPE LINE COMPANY, A CALIFORNIA CORPORATION  
 RECORDED : MAY 20, 1915 IN BOOK 241 OF DEEDS, PAGE 331  
 AFFECTS : A PORTION OF THE NORTHWEST 1/4 OF SECTION 14 (DESCRIBES THE WHOLE PROPERTY; EXISTING LINES ARE LOCATED ALONG THE MITCHELL CANYON ROAD RIGHT OF WAY)



M:\Jobs\18-16-00\TM C-2 BOUNDARY AND EXIST COND.dwg Plot Date: 3-23-20

DATE: MARCH, 2020	<b>LEGEND FOR TREES</b>		
SCALE:		<b>TREES TO BE REMOVED</b>	
DRAWN: TJB/YPS		<b>POTENTIAL TREES TO BE REMOVED</b>	
DESIGNED: HK/TB		<b>TREES TO REMAIN</b>	
ENGINEER: JR	NO.	BY	DATE
MANAGER: HK	REVISIONS		

PREPARED BY, OR UNDER THE DIRECTION OF:

**MERIDIAN ASSOCIATES, INC.**  
 CIVIL ENGINEERING • PLANNING • SURVEYING

1300A WILLOW PASS COURT  
 CONCORD, CA 94520

PHONE: 925-691-7300  
 FAX: 925-691-7110

**DeNova Homes**

1500 WILLOW PASS COURT, CONCORD, CA 94520  
 PHONE 925-685-0110 FAX 925-685-0660

SUBDIVISION 9536	TENTATIVE MAP	DIABLO CANYON	SHEET NO.
CLAYTON	CONTRA COSTA COUNTY	CALIFORNIA	JOB NO. 18-16-00

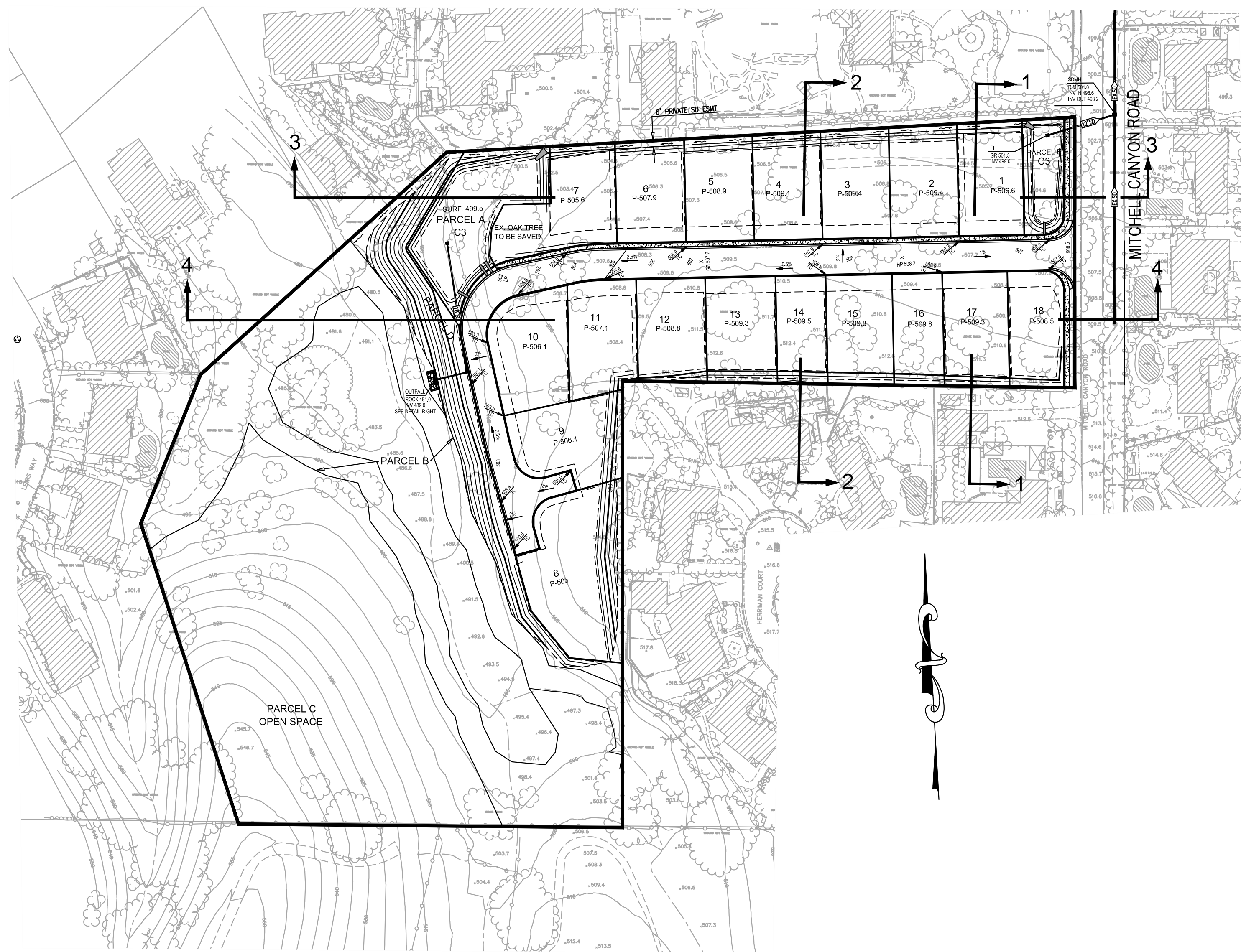
# VESTING TENTATIVE MAP FOR SUBDIVISION 9536 DIABLO MEADOWS

CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA

## SITE X-SECTIONS

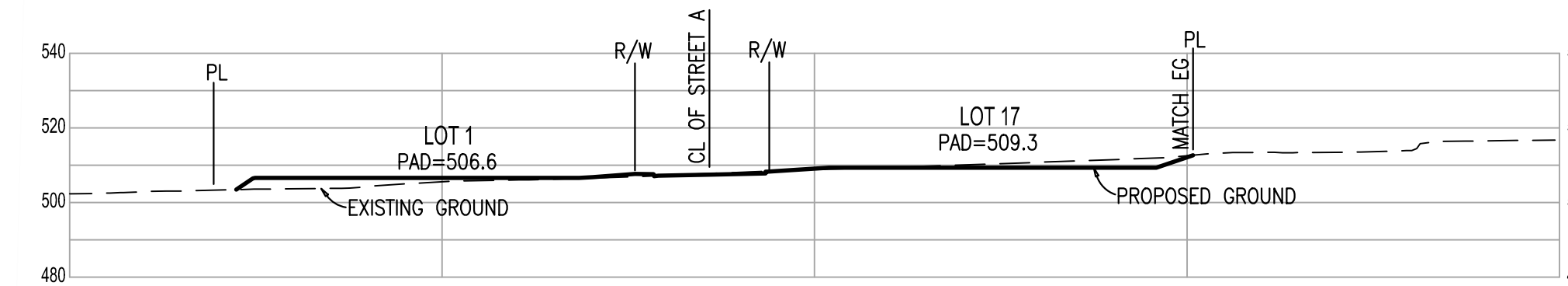
SCALE: AS SHOWN

APRIL, 2020  
UPDATED: JULY, 2020

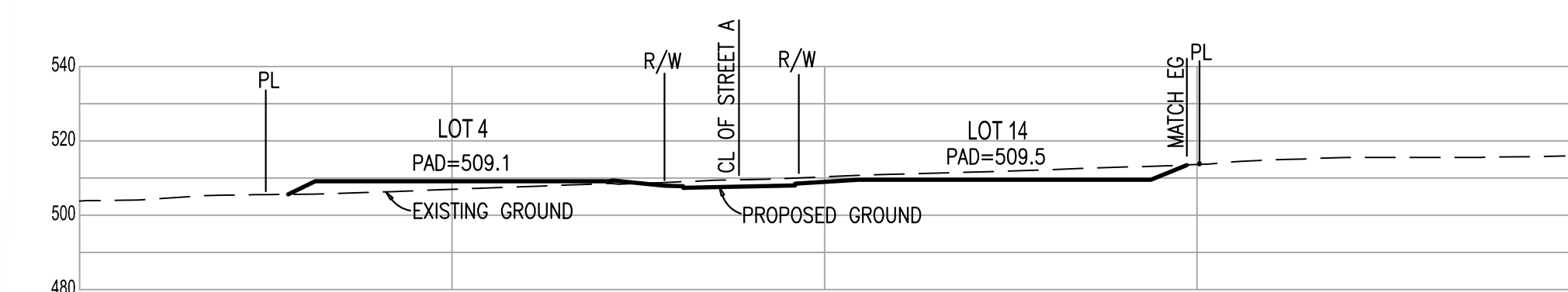


**SITE PLAN**

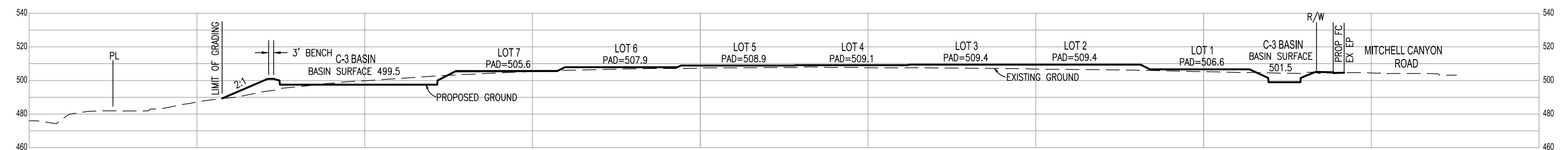
SCALE: 1" = 80' HORIZONTAL



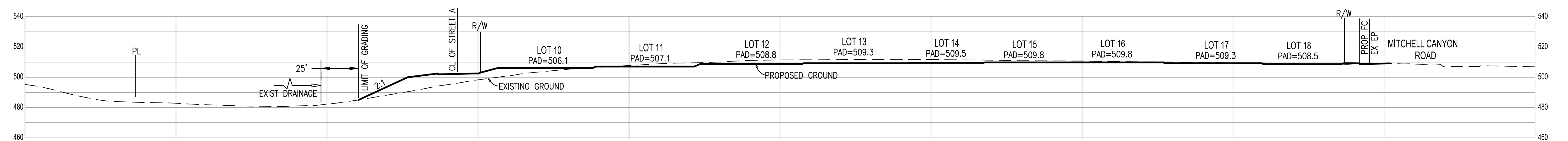
**SECTION 1-1**



**SECTION 2-2**



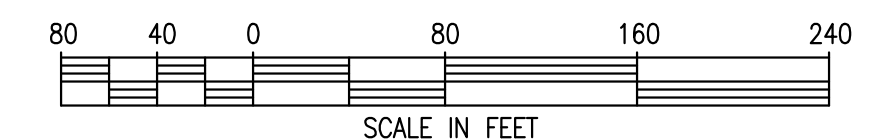
**SECTION 3-3**



**SECTION 4-4**

**SITE SECTIONS**

SCALE: 1" = 40' HORIZONTAL & VERTICAL



DATE: MARCH, 2020				
SCALE:				
DRAWN: TJB/YPS				
DESIGNED: HK/TB				
ENGINEER: JR/YYS				
MANAGER: HK				
	NO.	BY	DATE	REVISIONS

PREPARED BY, OR UNDER THE DIRECTION OF:

**MERIDIAN ASSOCIATES, INC.**  
CIVIL ENGINEERING • PLANNING • SURVEYING  
1300A WILLOW PASS COURT, CONCORD, CA 94520  
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FAX: 925-691-7110

**DeNova Homes**  
1500 WILLOW PASS COURT, CONCORD, CA 94520  
PHONE 925-685-0110 FAX 925-685-0660

SUBDIVISION 9536 TENTATIVE MAP DIABLO MEADOWS

## SITE X-SECTION

CLAYTON CONTRA COSTA COUNTY CALIFORNIA

SHEET NO.	
OF SHEETS	
JOB NO.	18-16-00

M:\Jobs\18-16-00\TM\C-3 GRADING.dwg Plot Date: 8-11-20





*First American Title*

First American Title Company  
4750 Willow Road, Suite 275  
Pleasanton, CA 94588

File No.: 0131-623819ala (KS)

This report has been amended/updated to reflect the following matters:

- No changes made to the report other than the Effective Date
- Property address has been revised
- Vesting has been revised
- [Legal Description](#) has been revised
- Taxes have been updated
- Original item number(s) 14, 15, 21 and 22 have been removed
- New item number(s) have been added
- Original item number(s) have been revised
- Other:

March 5, 2020



*First American Title*

## First American Title Company

4750 Willow Road, Suite 275

Pleasanton, CA 94588

California Department of Insurance License No. 151

Escrow Officer: Diane Burton  
Phone: (925)738-4050  
Fax No.: (866)648-7806  
E-Mail: dburton@firstam.com

Title Officer: Kimberly Speer  
Phone: (925)356-7195  
Fax No.: (714)689-4257  
E-Mail: kspeer@firstam.com

E-Mail Loan Documents to: Lenders please contact the Escrow Officer for email address for sending loan documents.

Owner: The Fred Clayton Trust  
Property: Mitchell Canyon Road  
Clayton, CA 94517

### PRELIMINARY REPORT

In response to the above referenced application for a policy of title insurance, this company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Exhibit A attached. *The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties.* Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

**Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.**

**It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.**

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of December 13, 2019 at 7:30 A.M.

The form of Policy of title insurance contemplated by this report is:

ALTA Extended Loan Policy - 2006

ALTA Extended Owner Policy - 2006

A specific request should be made if another form or additional coverage is desired.

Title to said estate or interest at the date hereof is vested in:

Fred B. Clayton and Karen E. Isobe, Trustees, Fred Clayton Trust

The estate or interest in the land hereinafter described or referred to covered by this Report is:

A fee.

The Land referred to herein is described as follows:

(See attached [Legal Description](#))

At the date hereof exceptions to coverage in addition to the printed Exceptions and Exclusions in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2019-2020.

First Installment:	\$677.05, PAID
Penalty:	\$67.70
Second Installment:	\$677.05, OPEN
Penalty:	\$0.00
Tax Rate Area:	13-006
A. P. No.:	<a href="#">121-090-011-2</a>

Affects: PORTION OF THE LAND

2. General and special taxes and assessments for the fiscal year 2019-2020.

First Installment:	\$423.13, PAID
Penalty:	\$42.31
Second Installment:	\$423.13, OPEN
Penalty:	\$0.00
Tax Rate Area:	13-006
A. P. No.:	121-090-016-1

Affects: PORTION OF THE LAND

3. Assessment liens, if applicable, collected with the general and special taxes, including but not limited to those disclosed by the reflection of the following on the tax roll:

Community Facilities District MT DIABLO MELLO ROOS.

Affects: APN: 121-090-016-1

Community Facilities District CLAYTON CFD 2006-1.

Community Facilities District CLAYTON CFD 2007-1.

4. Intentionally Deleted
  
5. The land lies within the boundaries of proposed community facilities District No. 1991-1, as disclosed by a map filed June 18, 1991 in Map Book 45, Page 4 of maps of assessment and community facilities districts, recorded June 18, 1991 as Instrument No. [1991-116423](#), of Official Records.

The terms and provisions contained in the document entitled "Resolution No. 35-91 Resolution of Intention to Establish Community Facilities District No. 1991-1 and to Authorize the Levy of a Special Tax Within the Proposed District Community Facilities District No. 1991-1" recorded June 18, 1991 as Instrument No. [1991-116424](#) of Official Records.

6. Intentionally Deleted
  
7. Intentionally Deleted
  
8. Intentionally Deleted
  
9. Intentionally Deleted
  
10. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
  
11. An easement for the construction, installation, maintenance, repair and operation of public utilities and incidental purposes, recorded September 16, 1914 in [Book 227 of Deeds, Page 283](#).  
In Favor of: Pacific Telephone and Telegraph Company  
Affects: as described therein

The location of the easement cannot be determined from record information.

12. An easement for the construction, installation, maintenance, repair and operation of a single line of poles, telephone and telegraph lines and incidental purposes, recorded May 20, 1915 in [Book 241 of Deeds, Page 331](#).  
In Favor of: Valley Pipe Line Company, a California corporation  
Affects: as described therein



The location of the easement cannot be determined from record information.

13. Intentionally Deleted
14. Intentionally Deleted
15. Intentionally Deleted
16. Any claim that the Title is subject to a trust or lien created under The Perishable Agricultural Commodities Act, 1930 (7 U.S.C. §§499a, et seq.) or the Packers and Stockyards Act (7 U.S.C. §§181 et seq.) or under similar state laws.
17. Intentionally Deleted
18. Water rights, claims or title to water, whether or not shown by the public records.
19. Any facts, rights, interests or claims which would be disclosed by a correct ALTA/NSPS survey.
20. Rights of parties in possession.

**Prior to the issuance of any policy of title insurance, the Company will require:**

21. Intentionally Deleted
22. Intentionally Deleted
23. An ALTA/NSPS survey of recent date which complies with the current minimum standard detail requirements for ALTA/NSPS land title surveys.

**INFORMATIONAL NOTES**

Note: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

1. According to the latest available equalized assessment roll in the office of the county tax assessor, there is located on the land a(n) COMMERCIAL STRUCTURE known as No Situs found , Clayton, California.

Affects: APN: [121-090-011-2](#)

2. The property covered by this report is vacant land.

Affects: APN: 121-090-016-1

3. According to the public records, there has been no conveyance of the land within a period of twenty four months prior to the date of this report, except as follows:

A document recorded September 05, 2018 as INSTRUMENT NO. [2018141867](#) OF OFFICIAL RECORDS  
From: FRED B. CLAYTON AND KAREN E. ISOBE, TRUSTEES, CLAYTON FAMILY TRUST  
To: FRED B. CLAYTON AND KAREN E. ISOBE, TRUSTEES, FRED CLAYTON TRUST

4. We find no outstanding voluntary liens of record affecting subject property. Disclosure should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any possible security interest in the subject property.

The map attached, if any, may or may not be a survey of the land depicted hereon. First American expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

### **LEGAL DESCRIPTION**

Real property in the City of Clayton , County of Contra Costa, State of California, described as follows:

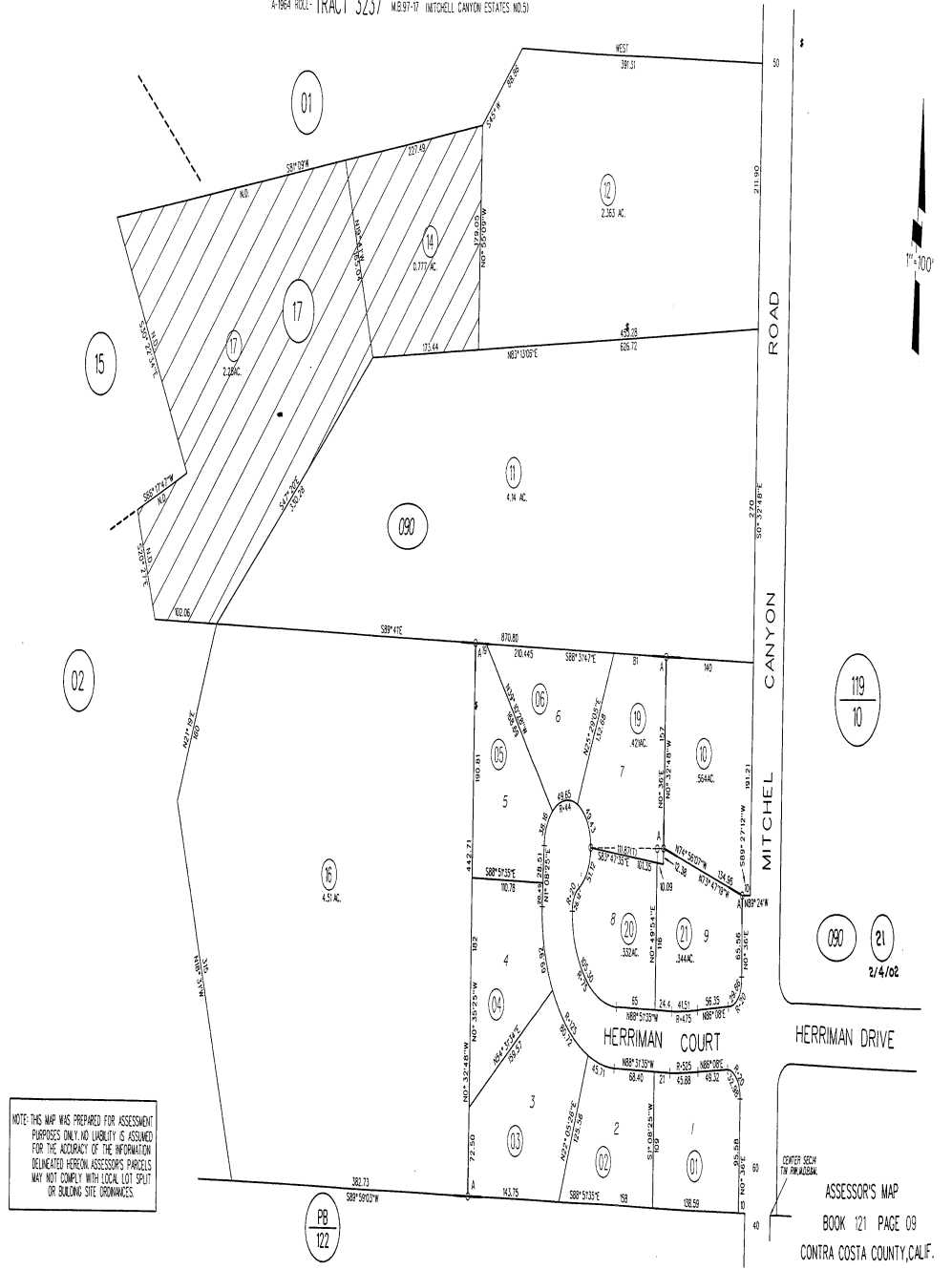
BEING A PART OF THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 NORTH, RANGE 1 WEST, MOUNT DIABLO BASE AND MERIDIAN, AS GRANTED IN THE DEED TO FRED B. CLAYTON AND MARY E. CLAYTON, HIS WIFE, AS JOINT TENANTS, RECORDED AUGUST 13, 1959 IN [BOOK 3432, PAGE 393](#), OFFICIAL RECORDS, CONTRA COSTA COUNTY RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FROM THE NORTH QUARTER CORNER OF SECTION 14, TOWNSHIP 1 NORTH, RANGE 1 WEST, MOUNT DIABLO BASE AND MERIDIAN, SOUTH 0° 32' 48" EAST, 2,203.10 FEET ALONG THE CENTER SECTION LINE OF SECTION 14; THENCE NORTH 89° 41' WEST, 40.00 FEET TO THE POINT OF BEGINNING; THENCE FROM SAID POINT OF BEGINNING, NORTH 89° 41' WEST, 450.41 FEET; THENCE SOUTH 0° 32' 48" EAST, 445.32 FEET; THENCE SOUTH 89° 59' 03" WEST, 382.73 FEET; THENCE NORTH 18° 31' WEST, 315.00 FEET; THENCE NORTH 21° 19' EAST, 160.00 FEET; THENCE NORTH 47° 20' EAST, 330.28 FEET; THENCE NORTH 86° 13' 06" EAST, 626.72 FEET; THENCE SOUTH 0° 32' 48" EAST 270.00 FEET TO THE POINT OF BEGINNING.

APN: [121-090-011-2](#) and 121-090-016-1

POR. NW 1/4 SEC. 14, T1N R1W, M.D.B.&M.

A-1964 ROLL-TRACT 3237 M.B.97-17 (MITCHELL CANYON ESTATES NO.51)



***NOTICE***

Section 12413.1 of the California Insurance Code, effective January 1, 1990, requires that any title insurance company, underwritten title company, or controlled escrow company handling funds in an escrow or sub-escrow capacity, wait a specified number of days after depositing funds, before recording any documents in connection with the transaction or disbursing funds. This statute allows for funds deposited by wire transfer to be disbursed the same day as deposit. In the case of cashier's checks or certified checks, funds may be disbursed the next day after deposit. In order to avoid unnecessary delays of three to seven days, or more, please use wire transfer, cashier's checks, or certified checks whenever possible.

**EXHIBIT A**  
**LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (BY POLICY TYPE)**

**CLTA STANDARD COVERAGE POLICY – 1990**  
**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
  - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
  - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
  - (c) resulting in no loss or damage to the insured claimant;
  - (d) attaching or created subsequent to Date of Policy; or
  - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

**EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I**

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.  
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

**CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)**  
**EXCLUSIONS**

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
  - a. building;
  - b. zoning;
  - c. land use;

- d. improvements on the Land;
  - e. land division; and
  - f. environmental protection.
- This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
  3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
  4. Risks:
    - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
    - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
    - c. that result in no loss to You; or
    - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
  5. Failure to pay value for Your Title.
  6. Lack of a right:
    - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
    - b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
  7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
  8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
  9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

**LIMITATIONS ON COVERED RISKS**

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:  
For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.  
The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1% of Policy Amount Shown in Schedule A or \$2,500 (whichever is less)	\$10,000
Covered Risk 18:	1% of Policy Amount Shown in Schedule A or \$5,000 (whichever is less)	\$25,000
Covered Risk 19:	1% of Policy Amount Shown in Schedule A or \$5,000 (whichever is less)	\$25,000
Covered Risk 21:	1% of Policy Amount Shown in Schedule A or \$2,500 (whichever is less)	\$5,000

**2006 ALTA LOAN POLICY (06-17-06)**  
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

  - (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;

- (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
  5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
  6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
    - (a) a fraudulent conveyance or fraudulent transfer, or
    - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
  7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

#### EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II, [t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

#### [PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.

#### PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

### 2006 ALTA OWNER'S POLICY (06-17-06)

#### EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;



- (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 or 10); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
- (a) a fraudulent conveyance or fraudulent transfer, or
  - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

#### EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of: [The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.
7. [Variable exceptions such as taxes, easements, CC&R's, etc. shown here.]

#### **ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (07-26-10)**

#### EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.

(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the

Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.

7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
  - (a) a fraudulent conveyance or fraudulent transfer, or
  - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.



## Privacy Notice

**Effective:** January 1, 2020

**Notice Last Updated:** January 1, 2020

This Privacy Notice describes how First American Financial Corporation and its subsidiaries and affiliates (together referred to as "First American," "we," "us," or "our") collect, use, store, and share your information. This Privacy Notice applies to information we receive from you offline only, as well as from third parties. For more information about our privacy practices, please visit <https://www.firstam.com/privacy-policy/index.html>. The practices described in this Privacy Notice are subject to applicable laws in the places in which we operate.

**What Type Of Information Do We Collect About You?** We collect both **personal** and **non-personal information** about and from you. **Personal information** is non-public information that can be used to directly or indirectly identify or contact you. **Non-personal information** is any other type of information.

**How Do We Collect Your Information?** We collect your **personal** and **non-personal information**: (1) directly from you; (2) automatically when you interact with us; and (3) from third parties, including business parties and affiliates.

**How Do We Use Your Information?** We may use your personal information in a variety of ways, including but not limited to providing the services you have requested, fulfilling your transactions, comply with relevant laws and our policies, and handling a claim. We may use your **non-personal information** for any purpose.

**How Do We Share Your Personal Information?** We do not sell your **personal information** to nonaffiliated third parties. We will only share your **personal information**, including to subsidiaries, affiliates, and to unaffiliated third parties: (1) with your consent; (2) in a business transfer; (3) to service providers; and (4) for legal process and protection. If you have any questions about how First American shares your **personal information**, you may contact us at [dataprivacy@firstam.com](mailto:dataprivacy@firstam.com) or toll free at 1-866-718-0097.

**How Do We Secure Your Personal Information?** The security of your **personal information** is important to us. That is why we take commercially reasonable steps to make sure your **personal information** is protected. We use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your **personal information**.

**How Long Do We Keep Your Personal Information?** We keep your **personal information** for as long as necessary in accordance with the purpose for which it was collected, our business needs, and our legal and regulatory obligations.

**Your Choices** We provide you the ability to exercise certain controls and choices regarding our collection, use, storage, and sharing of your **personal information**. In accordance with applicable law, your controls and choices. You can learn more about your choices, and exercise these controls and choices, by sending an email to [dataprivacy@firstam.com](mailto:dataprivacy@firstam.com) or toll free at 1-866-718-0097.

**International Jurisdictions:** Our Products are hosted and offered in the United States of America (US), and are subject to US federal, state, and local law. If you are accessing the Products from another country, please be advised that you may be transferring your **personal information** to us in the US, and you consent to that transfer and use of your **personal information** in accordance with this Privacy Notice. You also agree to abide by the applicable laws of applicable US federal, state, and local laws concerning your use of the Products, and your agreements with us.

We may change this Privacy Notice from time to time. Any and all changes to this Privacy Notice will be reflected on this page, and where appropriate provided in person or by another electronic method. **YOUR CONTINUED USE, ACCESS, OR INTERACTION WITH OUR PRODUCTS OR YOUR CONTINUED COMMUNICATIONS WITH US AFTER THIS NOTICE HAS BEEN PROVIDED TO YOU WILL REPRESENT THAT YOU HAVE READ AND UNDERSTOOD THIS PRIVACY NOTICE.**

**Contact Us** [dataprivacy@firstam.com](mailto:dataprivacy@firstam.com) or toll free at 1-866-718-0097.



### **For California Residents**

If you are a California resident, you may have certain rights under California law, including but not limited to the California Consumer Privacy Act of 2018 ("CCPA"). All phrases used in this section shall have the same meaning as those phrases are used under California law, including the CCPA.

**Right to Know.** You have a right to request that we disclose the following information to you: (1) the categories of **personal information** we have collected about or from you; (2) the categories of sources from which the **personal information** was collected; (3) the business or commercial purpose for such collection and/or disclosure of your personal information; (4) the categories of third parties with whom we have shared your **personal information**; and (5) the specific pieces of your **personal information** we have collected. To submit a verified request for this information, go to our online privacy policy at [www.firstam.com/privacy-policy](http://www.firstam.com/privacy-policy) to submit your request or call toll-free at 1-866-718-0097. You may also designate an authorized agent to submit a request on your behalf by going to our online privacy policy at [www.firstam.com/privacy-policy](http://www.firstam.com/privacy-policy) to submit your request or by calling toll-free at 1-866-718-0097 and submitting written proof of such authorization to [dataprivacy@firstam.com](mailto:dataprivacy@firstam.com).

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<b>Categories of Sources</b>	Categories of sources from which we've collected <b>personal information</b> include, but may not be limited to: the consumer directly; public records; governmental entities; non-affiliated third parties; social media networks; affiliated third parties
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February 28, 2020

**GEOTECHNICAL INVESTIGATION  
MITCHELL CANYON DEVELOPMENT  
CLAYTON, CALIFORNIA  
*SFB PROJECT NO. 155-90***

*Prepared For:*

DeNova Homes  
1500 Willow Pass Court  
Concord, CA 94520

*Prepared By:*

**Stevens, Ferrone & Bailey Engineering Company, Inc.**



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Jonathan Bailey, P.E., G.E.  
*Civil/Geotechnical Engineer*



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Kenneth C. Ferrone, P.E., G.E., C.E.G.  
*Civil/Geotechnical Engineer  
Certified Engineering Geologist*



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## **1.0 INTRODUCTION**

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This report presents the results of our geotechnical investigation for the proposed residential subdivision development to be located west of Mitchell Canyon Road (APN 121-090-011 & 121-090-016) in Clayton, California as shown on the Site Plan, Figure 1. The purpose of our investigation was to evaluate the geological and geotechnical conditions at the site and provide recommendations regarding the geotechnical engineering aspects of the project.

Based on the information indicated on the Site Plan, as well as information provided by DeNova Homes., it is our understanding that the project will consist of developing approximately 3 acres of land for a new 17-lot residential subdivision. A stormwater detention basin is also proposed. The project will be located to the east of an existing wetland and steep hillside area. Each new lot will include a single-family, detached home. Cut and fill grading is anticipated to develop flat building pad at each of the lots. Moderate grading will be needed to develop the site. Associated underground utilities and paved roadways will be constructed. The existing structures and facilities at the site will be demolished prior to new construction. Open space areas will be located to the west of the development area.

The conclusions and recommendations provided in this report are based upon the information presented above; Stevens, Ferrone & Bailey Engineering Company, Inc. (SFB) should be consulted if any changes to the project occur to assess if the changes affect the validity of this report.

## **2.0 SCOPE OF WORK**

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Our investigation of the site included the following scope of work:

- Reviewing published and unpublished geotechnical and geological literature relevant to the site;
- Reviewing a previous geotechnical investigation report by Abel R. Soares and Associates, dated July 13, 1976, including the results of two exploratory borings that extended to a maximum depth of about 6 feet;
- Performing geotechnical and geological reconnaissance of the site and surrounding area;
- Performing a supplemental subsurface exploration program, including drilling five exploratory borings to a maximum depth of about 21 feet and excavating five exploratory test pits to a maximum depth of about 6 feet;
- Performing laboratory testing of samples retrieved from the borings;
- Performing engineering analysis of the field and laboratory data; and
- Preparing this report.

The data obtained and the analyses performed were for the purpose of providing geotechnical design and construction criteria for site earthwork, underground utilities, drainage, building foundations, retaining walls, and pavements. Toxicity potential assessment of onsite materials or groundwater (including mold) and flooding evaluations were beyond our scope of work.

## **3.0 SITE INVESTIGATION**

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Reconnaissance of the site and surrounding area was performed on August 14, August 19, and August 26, 2019. Subsurface exploration was performed on August 19 and 26, 2019. Five exploratory borings were drilled using a truck-mounted drill rig equipped with 4-inch diameter, continuous flight, solid stem augers to a maximum depth of about 21 feet below existing grade. Five exploratory test pits were excavated using a CAT 430F2 backhoe to a maximum depth of about 6 feet below existing grade. Previously, two exploratory borings were drilled in 1976 by Abel R. Soares and Associates to a maximum depth of about 6 feet.

The approximate locations of all the borings and pits are shown on the Site Plan, Figure 1. Logs of our borings and pits and details regarding our field investigation are included in Appendix A. The results of our laboratory tests are discussed in Appendix B. Logs of the previous borings by others are included in Appendix C. It should be noted that changes in the surface and subsurface conditions can occur over time as a result of either natural processes or human activity and may affect the validity of the conclusions and recommendations in this report.

The exploratory pits were loosely backfilled and wheel-rolled upon completion. The pit backfill will require over-excavation and re-compaction at the time for the grading operations.

### **3.1 Site History and Surface Description**

At the time of our investigation and as shown on Figure 1, the site was bounded by Mitchell Canyon Road on the east, undeveloped land on the south, and existing residential developments on the other sides.

The entire site was L in shape and had a plan area of about 8.6 acres with maximum dimensions of about 870 feet by 690 feet. General site surface grades sloped gently downward towards the northwest, northeast, and north with slope inclinations varying from about 4:1 (horizontal to vertical) to 6:1 at higher elevations within the southwestern half of the site to about 10:1 to 23:1 at lower elevations with the northeastern half of the site. Ephemeral drainage channels extended through the southwestern half of the site from south to north.

The site was generally vacant except for a small shed and commercial lawnmower located near an existing oak tree at the northwestern corner of the site. The site surface vegetation consisted of a moderate to heavy growth of weeds and grasses and within the drainage channels heavy growths of trees, shrubs, and grasses. Small to large diameter trees were observed throughout the site.

Based on our review of historical topographic maps and aerial photographs of the site and vicinity, it is our understanding that the site was previously occupied by an orchard.

### **3.2 Subsurface Description**

The near-surface soil materials encountered in our borings generally consist of weak surface soils underlain by interbedded stiff to hard silty clays with sand, gravel, and rock fragments, and dense to very dense sands with clay, silt, gravel and rock fragments that extend to the maximum depth explored of about 21 feet. The near-surface soil materials encountered in our test pits generally consisted of soft to stiff clays and silts with sand and gravel and medium dense gravels with silt and sand. SFB Pits P-1 and P-3 encountered sandstone below surface soils. Bedrock encountered in the test pits was generally deeply to moderately weathered and friable to moderately strong. The two previous borings encountered similar conditions to the maximum depth explored of about 6 feet.

According to the results of laboratory testing, most of the near-surface more clayey soils have a low to medium plasticity and low to moderate expansion potential. Pit P-2, however, encountered a near-surface clay layer having high plasticity and high expansion potential. The soft to firm soils that mantle the site are weak and highly compressible; these soils typically extend to depths of about 2 feet except in the area of Pit P-3 (the northeast facing hillside in the southwest corner of the site) where weak and unstable soils extended to a depth of about 4 feet.

We anticipate soft, weak, and highly compressible soils with high water contents exist in the area of the eastern drainage channel. It has been our experience that these softer soils typically extend to depths of about 3 to 4 feet.

Detailed descriptions of the materials encountered in our exploratory borings, test pits, and borings by others are presented on the logs in Appendices A and C. Our attached boring and test pit logs and related information depict location-specific subsurface conditions encountered during our field investigation. The approximate locations of our borings and pits were determined using pacing or landmark references, and should be considered accurate only to the degree implied by the method used.

### **3.3 Groundwater**

Groundwater was encountered in Boring SFB-3 (near the drainage channel) at a depth of about 10 feet at the end of drilling. No groundwater was encountered in the other borings or pits. All our borings were backfilled with lean cement grout in accordance with Contra Costa County requirements prior to leave the site. It should be noted that the borings might not have been left open for a sufficient period of time to establish equilibrium groundwater conditions. In addition,

fluctuations in the groundwater level could occur due to change in seasons, variations in rainfall, and other factors.

### **3.4 Hydrologic Soil Group**

The surface soils of the site have been mapped as Gilroy clay loam (15 to 30 percent slopes, MLRA 15) in the southwest portion of the site, Gilroy clay loam (30 to 50 percent slopes, MLRA 15) in a small portion of the west corner, Los Osos clay loam (15 to 30 percent slopes, MLRA 15) in a small portion of the northwest corner, and Perkins gravelly loam (2 to 9 percent slopes) the rest of the site by USDA Web Soil Survey (WSS)<sup>1</sup>. The soils were assigned to Hydrologic Soil Group C and D by USDA Natural Resources Conservation Service (NRCS); the soils have been categorized as having very low to moderately high transmission rates (approximately 0.00 to 0.57 inches per hour).

Based on our site observations, the soils encountered in our borings, and the results of our laboratory testing, we recommend the near surface soils at the site be categorized as Group D soils. The Group D soils are defined as having a very slow infiltration rate when thoroughly wet (high runoff potential) and consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

### **3.5 Geology and Seismicity**

According to Helley and Graymer (1997)<sup>2</sup>, the site is underlain by Plio-Pleistocene undifferentiated continental gravel deposits that are generally composed of semi-consolidated to unconsolidated poorly sorted gravel, sand, silt and clay. According to Graymer, Jones, and Brabb (1994)<sup>3</sup>, the site (below surficial deposits) is underlain by Jurassic Diabase and Late Jurassic to early Cretaceous Knoxville Formation. The bedrock encountered by Pits P-1 and P-3 appeared to be sandstone of the Knoxville Formation. Our engineering geology map for the site is shown on Figure 1.

The project site is located in the San Francisco Bay Area that is considered one of the most seismically active regions in the United States. Significant earthquakes have occurred in the San Francisco Bay Area and are believed to be associated with crustal movements along a system of

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<sup>1</sup><http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> (accessed 08/21/19)

<sup>2</sup>Helley and Graymer, 1997, *Quaternary Geology of Contra Costa County, and Surrounding Parts of Alameda, Marin, Sonoma, Solano, Sacramento, and San Joaquin Counties, California: A Digital Database*, USGS Open-file Report 97-98.

<sup>3</sup>Graymer, Jones, and Brabb, 1994, *Preliminary Geologic Map Emphasizing Bedrock Formations in Contra Costa County, California: A Digital Database*, USGS Open-file Report 94-622.

sub-parallel fault zones that generally trend in a northwesterly direction. According to the Alquist-Priolo Earthquake Fault Zones Map of the Clayton Quadrangle, the site is not located in an earthquake fault zone as designated by the State of California<sup>4</sup>.

Earthquake intensities will vary throughout the San Francisco Bay Area, depending upon numerous factors including the magnitude of earthquake, the distance of the site from the causative fault, and the type of materials underlying the site. The U.S. Geological Survey (2016)<sup>5</sup> has stated that there is a 72 percent chance of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2014 and 2043. Therefore, the site will probably be subjected to at least one moderate to severe earthquake that will cause strong ground shaking.

According to the U.S. Geological Survey 's Unified Hazard Tool and applying the Dynamic: Conterminous U.S. 2008 (v3.3.2) model (accessed 08/21/19), the resulting deaggregation calculations indicate that the site has a 10% probability of exceeding a peak ground acceleration of about 0.57g in 50 years (design basis ground motion based on stiff soil to very dense soil and soft rock site condition; mean return time of 475 years). The actual ground surface acceleration might vary depending upon the local seismic characteristics of the underlying bedrock and the overlying unconsolidated soils.

### 3.6 Liquefaction

Soil liquefaction is a phenomenon primarily associated with saturated, cohesionless, soil layers located close to the ground surface. These soils lose strength during cyclic loading, such as imposed by earthquakes. During the loss of strength, the soil acquires mobility sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. According to ABAG and the U.S. Geological Survey<sup>6,7</sup>, the site is located in an area that has been characterized as having very low to low liquefaction susceptibility. As of the date of this report, the liquefaction potential of the site has not been evaluated by the State of California<sup>8</sup>.

Based on our review of available literature and the results of field explorations at the site, it is our opinion that the potential for ground surface damage at the site resulting from liquefaction is low.

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<sup>4</sup>State of California, *Special Studies Zones, Clayton Quadrangle*, Revised Official Map, Effective: July 1, 1993.

<sup>5</sup>Aagaard, Blair, Boatwright, Garcia, Harris, Michael, Schwartz, and DiLeo, *Earthquake Outlook for the San Francisco Bay Region 2014–2043*, USGS Fact Sheet 2016–3020, Revised August 2016 (ver. 1.1).

<sup>6</sup>Witter, Knudsen, Sowers, Wentworth, Koehler, and Randolph, 2006, *Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California*, USGS Open File Report 2006-1037.

<sup>7</sup>Knudsen, Sowers, Witter, Wentworth, and Helly, 2000, *Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County San Francisco Bay Region, California*, USGS Open File Report 00-444.

<sup>8</sup>Seismic Hazards Mapping Act, 1990.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

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It is our opinion that the site is suitable for the proposed project from a geotechnical engineering standpoint. The conclusions and recommendations presented in this report should be incorporated in the design and construction of the project to reduce soil or foundation related issues. The following are the primary geotechnical considerations for development of the site.

**WEAK SOIL RE-COMPACTION:** Weak and highly compressible soils mantle the development area of the site to depths of about 2 feet. In order to provide support of the planned improvements (such as fills, foundations, roadways, driveways, etc.), we recommend over-excavating the existing site grades about 1 foot, scarifying and re-compacting the bottom 12 inches in-place, and replacing the excavation with compacted fill materials. There would be no need to over-excavate soils within areas that do not support improvements, such as in planned open spaces beyond the limits of the lots. Where the over-excavation limits abut adjacent property, SFB should be consulted to determine the actual vertical and lateral extent of over-excavation so that adjacent property is not adversely impacted. Over-excavations should be performed so that no more than 5 feet of differential fill thickness will occur below the proposed building foundations. Removed soil can be used as new fill provided it is placed and compacted in accordance with the recommendations presented in this report.

The extent of the removal and re-compaction may vary across the site and should be determined in the field by SFB at the time of the earthwork operations.

The exploratory pits were loosely backfilled and wheel-rolled upon completion. The backfill will require over-excavation and re-compaction at the time for the grading operations.

**EXPANSION POTENTIAL:** Most of the clayey surficial soils were found to be moderately expansive and will be subjected to volume changes during seasonal moisture content fluctuations. To reduce the potential for post-construction distress to the proposed structure resulting from shrinkage and swelling of these materials, we recommend that the proposed structure be supported on a post-tensioned slab foundation system that is designed to reduce the impact of the expansive soils. It should be noted that special design considerations will also be required for exterior slabs.

The clayey soils encountered in Pit P-2 are highly expansive and can cause distress to overlying improvements when subjected to changes in moisture content. We recommend these highly expansive clays either (1) be completely over-excavated and mixed into planned fill materials or (2) be capped with at least 3 feet of engineered fill whose source is from elsewhere onsite. If alternative (1) is used, SFB should observe the over-excavation and mixing process so that the highly expansive clays are not placed in any one localized area.

**CUT/FILL TRANSITIONS AND DIFFERENTIAL FILL THICKNESS:** Proposed grading may result in cut/fill transitions across building pads and differential fill thickness greater than 5 feet below building foundations. In order to reduce the potential for excessive differential movement across the proposed home foundations, we recommend that foundations bear entirely on an engineered fill layer and that no more than 5 feet of differential fill thickness exist below foundations. Over-excavation and re-compaction below foundations will likely be necessary in some lots to satisfy this criterion.

**EROSION AND SLOPE MAINTENANCE:** Drainage and erosion control measures should be maintained during and after construction. Short-term and long-term erosion control are critical for the stability of any exposed cut and fill slopes, and may be necessary for the natural slopes in order to reduce sediment accumulation in the drainage systems. We recommend all exposed cut and fill slopes be seeded or planted with appropriately designed erosion resistant vegetation and fertilizer. The vegetation should be appropriately irrigated in order to establish and maintain growth. Over-watering should be avoided in order to reduce surficial instability and erosion. Vegetation should be deeply rooted to aid in the interlocking of the near-surface soils. Additional seeding and planting may be necessary in localized areas if the initial seeding or planting is unsuccessful. After seeding, fertilizing, and planting, staked erosion control blankets might be necessary to further stabilize the surficial soils.

Additional erosion control measures will need to be designed and implemented prior to the rainy season based upon the site's configuration. The measures could include straw wattles, silt fencing, hay bales, sediment collection basins, and filtration systems. Silt fencing should be designed for the site's soil type. Storm water discharge and release points from silt fencing should be designed to reduce erosion. In areas exposed to winter rains, we recommend an erosion control plan be prepared and implemented at least one month prior to the beginning of the rainy season. The erosion control measures will require inspection, modification, and re-mediation during the rainy season in order to comply with regulatory requirements.

**CORROSION POTENTIAL:** Four onsite soil sample was tested for pH (ASTM D4972), chlorides (ASTM D4327), sulfates (ASTM D4327), sulfides (ASTM D4658M), resistivity at 100% saturation (ASTM G57), and Redox potential (ASTM D1498) for use in evaluating the potential for corrosion on concrete and buried metal such as utilities and reinforcing steel. The results of these tests are included in Appendix B. We recommend these test results be forwarded to your underground contractors, pipeline designers, and foundation designers and contractors so that they can design and install corrosion protection measures. Please be aware that we are not corrosion protection experts; we recommend corrosion protection measures be designed and constructed so that all concrete and metal, including foundation post-tensioned cables and their end cut-offs, are protected against corrosion. We also recommend additional testing be performed



if the test results are deemed insufficient by the designers and installers of the corrosion protection. Landscaping soils typically contain fertilizers and other chemicals than can be highly corrosive to metals and concrete; landscaping soils commonly are in contact with foundations. Consideration should be given to testing the corrosion potential characteristics of proposed landscaping soils and other types of imported or modified soils in order to design and provide protection against corrosion for the foundation and pipelines.

**ADDITIONAL RECOMMENDATIONS:** Detailed drainage, earthwork, foundation, retaining wall, and pavement recommendations for use in design and construction of the project are presented below. We recommend SFB review the design and specifications to verify that the recommendations presented in this report have been properly interpreted and implemented in the design, plans, and specifications. We also recommend SFB be retained to provide consulting services and to perform construction observation and testing services during the construction phase of the project to observe and test the implementation of our recommendations, and to provide supplemental or revised recommendations in the event conditions different than those described in this report are encountered. We are not responsible for misinterpretation of our recommendations.

It is the responsibility of the contractors to provide safe working conditions at the site at all times. We recommend all OSHA regulations be followed, and excavation safety be ensured at all times. It is beyond our scope of work to provide excavation safety designs.

## **4.1 Earthwork**

### **4.1.1 Clearing and Site Preparation**

The site should be cleared of all obstructions including any existing structures and their entire foundation systems, existing utilities and pipelines and their associated backfill, designated trees and their associated entire root systems, and debris. Holes resulting from the removal of underground obstructions extending below the proposed finish grade should be cleared and backfilled with fill materials as specified in **Section 4.1.4, *Fill Material***, and compacted to the requirements in **Section 4.1.5, *Compaction***. Tree roots may extend to depths of about 3 to 4 feet. Wells and septic systems, if they exist, should be abandoned in accordance with Contra Costa County standards.

From a geotechnical standpoint, any existing trench backfill materials, clay or concrete pipes, pavements, and concrete that are removed can be used as new fill onsite provided debris is removed and it is broken up to meet the size requirement for fill material in **Section 4.1.4, *Fill Material***. We recommend fill materials composed of broken up concrete or asphalt concrete not be located

within 3 feet of the ground surface in yard areas. Consideration should be given to placing these materials below pavements, directly under building footprints, or in deeper excavations. We recommend backfilling operations for any excavations be performed under the observation and testing of SFB.

At least two weeks prior to grading, areas containing surface vegetation should be mowed and the cut grasses and weeds removed from the site or stockpiled for use in landscaping. After mowing, the site should be disced or stripped. Portions of the site containing heavy surface vegetation that is not removed by discing should be stripped to an appropriate depth to remove these materials. The amount of actual stripping should be determined in the field by SFB at the time of construction. Stripped materials should be removed from the site or stockpiled for later use in landscaping, if desired.

#### **4.1.2 Weak Soil Re-Compaction**

As described previously, the upper two feet of the surface soils are generally loose, weak, and potentially compressible. In order to reduce the potential for damaging differential settlement of overlying improvements (such as new fills, building foundations, exterior flatwork, and pavements), we recommend these weak soil materials be completely removed and re-compacted.

We estimate the process can consist of over-excavating the existing surface grade 1 foot, scarifying and re-compacting the bottom 12 inches in-place, and replacing the excavation with compacted fill materials. There would be no need to over-excavate soils within areas that do not support improvements, such as within planned open spaces.

Where the over-excavation limits abut adjacent property, SFB should be consulted to determine the actual vertical and lateral extent of over-excavation so that adjacent property is not adversely impacted. Over-excavations should be performed so that no more than 5 feet of differential fill thickness exists below the proposed building foundations. The extent of the removal and re-compaction may vary across the site and should be determined in the field by SFB at the time of the earthwork operations.

Removed fill and soil materials may be used as new fill onsite provided it satisfies the recommendations provided in **Section 4.1.4, *Fill Material***. Compaction should be performed in accordance with the recommendations in **Section 4.1.5, *Compaction***.

#### **4.1.3 Subgrade Preparation**

After the completion of clearing, site preparation, and weak soil re-compaction, soil exposed in areas to receive improvements (such as structural fill, building foundations, driveways, exterior flatwork, and pavements) should be scarified to a depth of about 12 inches, moisture conditioned

to approximately 2 to 3 percent over optimum water content, and compacted to the requirements for structural fill.

If building pads or pavement subgrade are allowed to remain exposed to sun, wind, or rain for an extended period of time, or are disturbed by borrowing animals or vehicles, the exposed subgrade or pavement subgrade may need to be reconditioned (moisture conditioned and/or scarified and recompacted) prior to foundation or pavement construction. SFB should be consulted on the need for subgrade reconditioning when the subgrade is left exposed for extended periods of time.

#### **4.1.4 Fill Material**

From a geotechnical and mechanical standpoint, onsite soils having an organic content of less than 3 percent by volume can be used as fill. Fill should not contain rocks or lumps larger than 6 inches in greatest dimension with not more than 15 percent larger than 2.5 inches. If required, imported fill should have a plasticity index of 15 or less and have a significant amount of cohesive fines.

In addition to the mechanical properties specifications, all imported fill material should have a resistivity (100% saturated) no less than the resistivity for the onsite soils, a pH of between approximately 6.0 and 8.5, a total water soluble chloride concentration less than 300 ppm, and a total water soluble sulfate concentration less than 500 ppm. We recommend import samples be submitted for corrosion and geotechnical testing at least two weeks prior to being brought onsite.

#### **4.1.5 Compaction**

Within the upper 5 feet of the finished ground surface, we recommend structural fill be compacted to at least 90 percent relative compaction, and structural fill below a depth of 5 feet be compacted to at least 95 percent relative compaction, as determined by ASTM D1557 (latest edition). We recommend the new fill be moisture conditioned approximately 2 to 3 percent over optimum water content. The upper 6 inches of subgrade soils beneath pavements should be compacted to at least 95 percent relative compaction. Fill material should be spread and compacted in lifts not exceeding approximately 8 to 12 inches in un-compacted thickness.

#### **4.1.6 Engineered Slopes**

##### ***4.1.6.1 General***

We recommend cut and non-reinforced fill slopes not exceed an inclination of 2:1 (horizontal to vertical). Steeper fill slopes are feasible provided they are mechanically reinforced with geogrid; if requested, SFB can provide detailed designs of slope reinforcing if needed. We recommend all cut and fill slopes be constructed with surface drainage collection and discharge facilities. Shallow slope movements such as surficial sloughing, toppling, and flows, however, could still occur as a

result of erosion and unanticipated water infiltration. To decrease the potential for shallow slope movement, the drainage and erosion control recommendations presented in this report should be implemented in the design and construction of the site. The implemented drainage and erosion control measures should be maintained during and after construction. Slope benches should be constructed in accordance with the latest edition of the California Building Code. Slope maintenance may include re-establishing drainage patterns, controlling water infiltration, and repairing shallow slope movements.

#### **4.1.6.2 Fill Slopes**

We recommend fill slopes be built using well-mixed, moisture conditioned, and well blended engineered fill to reduce the potential for slope expansion and creeping. We also recommend that fill slopes be over-built approximately 2 feet horizontally and then trimmed back to finished grades. Where fills are placed on slopes steeper than 10:1 (horizontal to vertical), the fills should be keyed at least 5 feet into competent native soils or at least 3 feet into competent bedrock. Keyways should be at least 10 feet wide and a subdrain should be placed at the bottom and to the rear of each keyway. The keyway should be sloped toward the back of the key at 2 percent or steeper. A subgrade bench and subdrain should be provided for approximately every 10 feet of vertical elevation gain, and the bench should extend at least one foot into competent soils or bedrock. Subdrain construction is described in **Section 4.1.7, *Subsurface Drainage***. The actual extent of the keying, benching, and subdrainage should be determined by SFB during earthwork operations. SFB should also be consulted during the development of grading plans to estimate locations of keyways and subdrains.

#### **4.1.7 Subsurface Drainage**

In order to reduce the potential for subsurface water created issues, we recommend subdrains be installed below engineered fill placed on slopes, at the toe of slopes, and where open space areas direct water toward improvements. During the earthwork operations, additional subdrains may be necessary in areas of encountered or anticipated seepage on the slopes. We recommend a subdrain be located below lined ditches or earthen swales that collect surface water from open space areas; the purpose of the subdrain is to intercept water that can flow under ditches and cause damage and distress. The actual location and extent of subdrains should be assessed by SFB during the development of the grading and improvement plans and determined in the field by SFB at the time of construction.

Where used, subdrains should consist of 4-inch diameter, rigid perforated pipe (perforations down) surrounded by free draining, uniformly graded, 1/2 to 3/4-inch crushed gravel wrapped in filter fabric such as Mirafi 140N or equivalent. The pipe should be underlain by about 1/2 to 1 inch of the gravel, and on the sides by at least 4 inches of gravel. The filter fabric should overlap approximately 12 inches or more at joints. Subdrains should be connected to a solid, rigid,

collector pipe with a minimum diameter of 4 inches. Subdrain pipes can consist of rigid ABS (SDR-35) or PVC A-2000 (or equal) for fills less than 20 feet in height. Collector pipes should be connected to appropriate discharge facilities such as storm drains, drainage inlets, or storm drain manholes. Subdrain clean-outs should be provided. The clean-out locations should be based upon the reach of the rotary cleaning systems and the restrictions of pipe bends. Caltrans Class 2 permeable material may be used in lieu of gravel and filter fabric.

Where used, subdrain trenches should be at least 12 inches wide and about 4 feet deep below adjacent ground surface. If a subdrain trench extends to the ground surface and is not covered with concrete lined ditch or concrete flatwork, we recommend the subdrain trench be covered with a 12-inch thick cap consisting of native soil compacted to at least 90 percent relative compaction.

#### **4.1.8 Utility Trench Backfill**

Pipeline trenches should be backfilled with fill placed in lifts of approximately 8 inches in uncompacted thickness. Thicker lifts can be used provided the method of compaction is approved by SFB and the required minimum degree of compaction is achieved. Backfill should be placed by mechanical means only. Jetting is not permitted.

Onsite trench backfill should be compacted to at least 90 percent relative compaction. Imported sand trench backfill should be compacted to at least 95 percent relative compaction and sufficient water is added during backfilling operations to prevent the soil from "bulking" during compaction. The upper 3 feet of trench backfill in foundation, slab, and pavement areas should be entirely compacted to at least 95 percent relative compaction. To reduce piping and settlement of overlying improvements, we recommend rock bedding and rock backfill (if used) be completely surrounded by a filter fabric such as Mirafi 140N (or equivalent); alternatively, filter fabric would not be necessary if Caltrans Class 2 permeable material is used in lieu of rock bedding and rock backfill.

Sand or gravel backfilled trench laterals that extend toward driveways, exterior slabs-on-grade, or under the building foundations, and are located below irrigated landscaped areas such as lawns or planting strips, should be plugged with onsite clays, low strength concrete, or sand/cement slurry. The plug for the trench lateral should be located below the edge of pavement or slabs, and under the perimeter of the foundation. The plug should be at least 24 inches thick, extend the entire width of the trench, and extend from the bottom of the trench to the top of the sand or gravel backfill.

#### **4.1.9 Exterior Flatwork**

We recommend that exterior slabs (including patios, sidewalks, and driveways) be placed directly on the properly compacted fills. We do not recommend using aggregate base, gravel, or crushed rock below these improvements. If imported granular materials are placed below these elements,

subsurface water can seep through the granular materials and cause the underlying soils to saturate or pipe. Prior to placing concrete, subgrade soils should be moisture conditioned to increase their moisture content to approximately 2 to 3 percent above laboratory optimum moisture (ASTM D-1557).

The more expansive clayey soils at the site could be subjected to volume changes during fluctuations in moisture content. As a result of these volume changes, some vertical movement of exterior slabs (such as driveways, sidewalks, patios, exterior flatwork, etc.) should be anticipated. This movement could result in damage to the exterior slabs and might require periodic maintenance or replacement. Adequate clearance should be provided between the exterior slabs and building elements that overhang these slabs, such as window sills or doors that open outward.

We recommend reinforcing exterior slabs with steel bars in lieu of wire mesh. To reduce potential crack formation, the installation of #4 bars spaced at approximately 24 inches on center in both directions should be installed. Score joints and expansion joints should be used to control cracking and allow for expansion and contraction of the concrete slabs. We recommend appropriate flexible, relatively impermeable fillers be used at all cold/expansion joints. The installation of dowels at all expansion and cold joints will reduce differential slab movements; the dowels should be at least 30 inches long and should be spaced at a maximum lateral spacing of 24 inches. Although exterior slabs that are adequately reinforced will still crack, trip hazards requiring replacement of the slabs will be reduced if the slabs are properly reinforced.

#### **4.1.10 Construction during Wet Weather Conditions**

If construction proceeds during or shortly after wet weather conditions, the moisture content of the onsite soils could be significantly above optimum. Consequently, subgrade preparation, placement and/or reworking of onsite soil or fills as structural fill might not be possible. Alternative wet weather construction recommendations can be provided by our representative in the field at the time of construction, if appropriate. All the drainage measures recommended in this report should be implemented and maintained during and after construction, especially during wet weather conditions.

#### **4.1.11 Surface Drainage, Irrigation, and Landscaping**

Ponding of surface water must not be allowed on pavements, adjacent to foundations, at the top or bottom of slopes, and at the top or adjacent to catchment and retaining walls. Ponding of water should also not be allowed on the ground surface adjacent to or near exterior slabs, including driveways, walkways, and patios. Surface water should not be allowed to flow over the top of slopes, down slope faces, or over catchment and retaining walls.

We recommend positive surface gradients of at least 2 percent be provided adjacent to foundations to direct surface water away from the foundations and toward suitable discharge facilities. Roof downspouts and landscaping drainage inlets should be connected to solid pipes that discharge the collected water into appropriate water collection facilities. We recommend the surface drainage be designed in accordance with the latest edition of the California Building Code.

In order to reduce differential foundation movements, landscaping (where used) should be placed uniformly adjacent to the foundation and exterior slabs. We recommend trees be no closer to the structure or exterior slabs than half the mature height of the tree; in no case should tree roots be allowed to extend near or below the foundations or exterior slabs.

Drainage inlets should be provided within enclosed planter areas and the collected water should be discharged onto pavement, into drainage swales, or into storm water collection systems. In order to reduce the potential for heaving, consideration should be given to lining planting areas and collecting the accumulated surface water in subdrain pipes that discharge to appropriate collection facilities. The drainage should be designed and constructed so that the moisture content of the soils surrounding the foundations do not become elevated and no ponding of water occurs. The inlets should be kept free of debris and be lower in elevation than the adjacent ground surface.

We recommend regular maintenance of the drainage systems be performed, including maintenance prior to rainstorms. The inspection should include checking drainage patterns to make sure they are performing properly, making sure drainage systems and inlets are functional and not clogged, and checking that erosion control measures are adequate for anticipated storm events. Immediate repairs should be performed if any of these measures appears to be inadequate.

Irrigation should be performed in a uniform, systematic manner as equally as possible on all sides of the foundations and exterior slabs to maintain moist soil conditions. Over-watering must be avoided. To reduce moisture changes in the natural soils and fills in landscaped areas, we recommend that drought resistant plants and low flow watering systems be used. All irrigation systems should be regularly inspected for leakage.

#### **4.1.12 Storm Water Runoff Structures**

To satisfy local and state permit requirements, most new development projects must control pollutant sources and reduce, detain, retain, and/or treat specified amounts of storm water runoff. The intent of these types of improvements is to conserve and incorporate on-site natural features, together with constructed hydrologic controls, to more closely mimic pre-development hydrology and watershed processes.

We recommend storm water collection improvements that are designed to detain, retain, and/or treat water such as bio-swales, porous pavement structures, and water detention basins, be lined with a relatively impermeable membrane in order to reduce water seepage and the potential for damage and distress to other infrastructure improvements (such as pavements, foundations, and walkways) which can occur as a result of volumetric soil/fill changes (heaving and shrinking of the surrounding soil/fill). We recommend a relatively impermeable membrane such as STEGO Wrap 15-mil or equivalent be installed below and along the sides of these facilities that direct the collected water into subdrain pipes. The membrane should be lapped and sealed in accordance with the manufacture's specifications, including taping joints where pipes penetrate the membrane. A subdrain pipe should be used at the base of the infiltration materials to collect accumulated water and transmit the water to an appropriate facility.

Soil filter materials within basins and swales will consolidate over time causing long-term ground surface settlement. Additional filling within the basins and swales over time will be needed to maintain design surface elevations. The soil filter materials, infiltration testing and procedures, and associated compaction requirements should be specified by the Civil Engineer and shown in detail on the grading and improvement plans.

Sidewalls of earthen swales and basins steeper than 3:1 (horizontal to vertical) will experience downward and lateral movements that can cause significant ground surface movements, including movement of adjacent improvements such as foundations, utilities, pavements, driveways, walkways, and curbs and gutters. The magnitude and rate of movement depends upon the swale and basin backfill material type and compaction. To reduce the potential for damaging movements, we recommend 3:1 sidewall slopes be used for earthen swales and basins, sidewalks be setback at least 3 feet from the top of the slope, creep sensitive improvements (such as roadway curbs) be setback at least 5 feet from the top of the slopes, or the slopes/sidewalls be appropriately restrained using an engineered retaining system, such as deepened curbs and foundations that are designed to resist lateral earth pressures and act as a retaining wall.

SFB should be consulted regarding the use, locations, and design of storm water detention and filtration facilities. We also recommend SFB observe and document the installation of liners, subdrain pipes, and soil filter materials during construction for conformance to the recommendations in this report and the development's plans and specifications.

#### **4.1.13 Future Maintenance**

In order to reduce water related issues, we recommend regular maintenance of the site and each lot be performed, including maintenance prior to rainstorms. Maintenance should include the re-compaction of loosened soils, collapsing and infilling holes with compacted soils or low strength sand/cement grout, removal and control of digging animals, modifying storm water drainage



patterns to allow for sheet flow into drainage inlets or ditches rather than concentrated flow or ponding, removal of debris within drainage ditches and inlets, and immediately repairing any erosion or soil flow. The inspection should include checking drainage patterns, making sure drainage systems are functional and not clogged, and erosion control measures are adequate for anticipated storm events. Immediate repair should be performed if any of these measures appear to be inadequate. Temporary and permanent erosion and sediment control measures should be installed over any exposed soils immediately after repairs are made.

Differential movement of exterior slabs can occur over time as a result of numerous factors. We recommend homeowners, the HOA, and development owners perform inspections and maintenance of slabs, including infilling significant cracks, providing fillers at slab offsets, and replacing slabs if severely damaged.

#### **4.1.14 Additional Recommendations**

We recommend that drainage, irrigation, landscaping, and maintenance recommendations provided in this report be forwarded to your designers and contractors, and we recommend they be included in disclosure statements given to homeowners, development owners, and their maintenance associations.

## **4.2 Foundation Support**

### **4.2.1 Post-Tensioned Slabs**

The proposed residential buildings can be supported on a post-tensioned slab foundation that is designed for the expansion potential of onsite soils. The slab foundation should bear entirely on properly prepared, compacted structural fill. Prior to the concrete pour, we recommend the moisture content of the pad subgrade materials be approximately 2 to 3 percent above laboratory optimum moisture. If the building pads are left exposed for an extended period of time prior to constructing foundations, we recommend SFB be contacted for recommendations to re-condition pads in order provide adequate building support.

The post-tensioned slab thickness should be determined by the Structural Engineer, however we recommend the post-tensioned slabs be at least 10 inches thick. An allowable bearing pressure of 1,500 pounds per square foot can be used for localized point and line loads. Deflection of the slab foundations should not exceed the values recommended in the most recent PTI Manual. Lateral loads, such as derived from earthquakes and wind, can be resisted by friction between the post-tensioned slab foundation bottom and the supporting subgrade. A friction coefficient of 0.25 is considered applicable.

At least 10 feet of cover should be provided between the outer face of slabs and un-retained slope faces, as measured laterally between slope faces and the slabs. Where less than 10 feet of cover exists, deepening of the edge of slabs may be necessary in order to achieve 10 feet of cover for buildings located near tops of slopes. Where slabs are located adjacent to utility trenches, the slab bearing surface should bear below an imaginary 1 horizontal to 1 vertical plane extending upward from the bottom edge of the adjacent utility trench. Alternatively, the slab reinforcing could be increased to span the area defined above assuming no soil support is provided.

A vapor retarder must be placed between subgrade soils and the bottom of the slabs-on-grade. We recommend the vapor retarder consist of a single layer of Stego Wrap Vapor Barrier 15 mil Class A or equivalent provided the equivalent satisfies the following criteria: a permeance as tested before and after mandatory conditioning of less than 0.01 Perms and strength of Class A as determined by ASTM E 1745 (latest edition), and a thickness of at least 15 mils. Installation of the vapor retarder should conform to the latest edition of ASTM E 1643 (latest edition) and the manufacturers requirements, including all joints should be lapped at least 6 inches and sealed with Stego Tape or equal in accordance with the manufacturer's specifications. Protrusions where pipes or conduit penetrate the membranes should be sealed with either one or a combination of Stego Tape, Stego Mastic, Stego Pipe Boots, or a product of equal quality as determined by the manufacturer's instructions and ASTM E 1643. Care must be taken to protect the membrane from tears and punctures during construction. We do not recommend placing sand or gravel over the membrane.

Concrete slabs retain moisture and often take many months to dry; construction water added during the concrete pour further increases the curing time. If the slabs are not allowed to completely cure prior to constructing the super-structure, the concrete slabs will expel water vapor and the vapor will be trapped under impermeable flooring. The concrete mix design for the slabs should have a maximum water/cement ratio of 0.45; the actual water/cement ratio may need to be reduced if the concentration of soluble sulfates or chlorides in the supporting subgrade is detrimental to the concrete. The results of sulfate and chloride testing of four onsite soil samples are included under separate cover. We recommend you consult with your concrete slab designers and concrete contractors regarding methods to reduce the potential for differential concrete curing.

An experienced Structural Engineer should design the post-tensioned slabs to resist the differential soil movement. The preliminary soil design parameters presented below were generated using the procedures presented in the Post-Tensioning Institute (PTI) design manual and PTI published specifications, and the PTI preferred computer program VOLFLO was employed to simulate the wetting and drying scenarios of the soils beneath the post-tensioned slabs.

The values provided below are based upon the post-tensioned slab foundations being entirely surrounded by uniform, properly drained, moderately irrigated landscaping; if differing conditions

exist that will cause differential soil moisture adjacent or below the slabs, or if portions of the foundations will be located adjacent to relatively dry or wet soils, then we should be consulted and modifications to the values below would need to be modified in writing. Please refer to **Section 4.1.11, Surface Drainage, Irrigation, and Landscaping**, for additional recommendations. We recommend that slab-subgrade friction values provided in the most recent PTI Manual be used in order to determine the friction that might be expected to exist during tendon stressing.

#### **SWELLING MODE**

	<u>Center Lift</u>	<u>Edge Lift</u>
Edge Moisture Variation Distance ( $e_m$ )	9.0 feet	5.0 feet
Differential Soil Movement ( $y_m$ )	0.5 inch	1.0 inch

We recommend SFB review the foundation drawings and specifications prior to submittal to verify that the recommendations provided in this report have been used and properly interpreted in the design of the slabs.

#### **4.2.2 Retaining Walls**

If segmental block walls with geogrid will be used at the site, SFB should be contacted to provide block wall and geogrid designs and specifications.

Where walls retain soil, they must be designed to resist both lateral earth pressures and any additional lateral loads caused by surcharging such as building and roadway loads. Where walls are used to retain soil, we recommend unrestrained walls (walls free to deflect and disconnected from other structures) be designed to resist an equivalent fluid pressure of 40 pounds per cubic foot. This assumes a level backfill. Restrained walls (walls restrained from deflection) should be designed to resist an equivalent fluid pressure of 40 pounds per cubic foot plus a uniform pressure of  $8H$  pounds per square foot, where  $H$  is the height of the wall in feet. Walls with inclined backfill should be designed for an additional equivalent fluid pressure of 1 pound per cubic foot for every 2 degrees of slope inclination. Walls subjected to surcharge loads should be designed for an additional uniform lateral pressure equal to one-third and one-half the anticipated surcharge load for unrestrained and restrained walls, respectively. These lateral pressures depend upon the moisture content of the retained soils to be constant over time; if the moisture content of the retained soils will fluctuate or increase compared to the moisture content at time of construction, then SFB should be consulted and provide written modifications to this design criteria.

For retaining walls that need to resist earthquake induced lateral loads from nearby foundations, walls that are to be designed to resist earthquake loads, and any retaining walls that are higher than

6 feet (as required by the 2016 CBC), we recommend the walls also be designed to resist a triangular pressure distribution equal to an equivalent fluid pressure of 30 pounds per cubic foot based on the ground acceleration from a design basis earthquake. This seismic induced earth pressure is in addition to the pressures noted above. Due to the transient nature of the seismic loading, a factor of safety of at least 1.0 can be used in the design of the walls when they resist seismic lateral loads. Some movement of the walls may occur during moderate to strong earthquake shaking and may result in distress as is typical for all structures subjected to earthquake shaking.

The recommended lateral pressures assume walls are fully-back drained to prevent the build-up of hydrostatic pressures. This can be accomplished by using  $\frac{1}{2}$  to  $\frac{3}{4}$  inch crushed, uniformly graded gravel entirely wrapped in filter fabric such as Mirafi 140N or equal (an overlap of at least 12 inches should be provided at all fabric joints). The gravel and fabric should be at least 8 inches wide and extend from the base of the wall to within 12 inches of the finished grade at the top (Caltrans Class 2 permeable material (Section 68) may be used in lieu of gravel and filter fabric). A 4-inch diameter, perforated pipe should be installed at the base and centered within the gravel. The perforated pipe should be connected to a solid collector pipe that transmits the water directly to a storm drain, drainage inlet, or onto pavement. If weep holes are used in the wall, the perforated pipe within the gravel is not necessary provided the weep holes are kept free of animals and debris, are located no higher than approximately 6 inches from the lowest adjacent grade, and are able to function properly. As an alternative to using gravel, drainage panels (such as AWD SITEDRAIN Sheet 94 for walls or equal) may be used behind the walls in conjunction with perforated pipe (connected to solid collector pipe), weep holes, or strip drains (such as SITEDRAIN Strip 6000 or equal). If used, the drainage panels can be spaced on-center at approximately 2 times the panel width.

If heavy compaction equipment is used behind the walls, the walls should be appropriately designed to withstand loads exerted by the heavy equipment and/or temporarily braced. Fill placed behind walls should conform to the recommendations provided in **Section 4.1.4, Fill Material**, and **Section 4.1.5, Compaction**.

Retaining walls can be supported on drilled, cast-in-place, straight shaft friction piers that develop their load carrying capacity in the materials underlying the site. The piers should have a minimum diameter of 12 inches and a center-to-center spacing of at least three times the shaft diameter. We recommend that piers be at least 6 feet long. The pier reinforcing should be based on structural requirements but in no case should less than two #4 bars for the entire length of the pier be used.

The actual design depth of the piers should be determined using an allowable skin friction of 500 pounds per square foot (psf) for dead plus live loads, with a one-third increase for all loads including wind or seismic. Seventy percent of the skin friction value can be used to resist uplift.

Lateral load resistance can be developed in passive resistance for pier foundations. A passive resistance equal to an equivalent fluid weighing 350 pounds per cubic foot acting against twice the projected diameter of pier shafts can be used. The upper two feet of pier embedment should be neglected in the vertical and passive resistance design as measured from finished grade. The portion of the pier shaft located within 10 feet (as measured laterally) of the nearest slope face should also be ignored in the design.

We recommend the pier foundations be located outside of (or beyond) a 1:1 (horizontal to vertical) plane projected upward from the base of any wall or utility trench, or the portion of a pier located within this zone should be ignored in the design of the pier.

The bottoms of the pier excavations should be relatively dry and free of all loose cuttings or slough prior to placing reinforcing steel and concrete. Any accumulated water in pier excavations should be removed prior to placing concrete. We recommend that the excavation of all piers be performed under the direct observation of SFB to confirm that the pier foundations are founded in suitable materials and constructed in accordance with the recommendations presented herein. Preliminarily, we recommend concrete pours of pier excavations be performed within 24 hours of excavation and prior to any rainstorms. Where caving or high groundwater conditions exist, additional measures such as using casing, tremie methods, and pouring concrete immediately after excavating may be necessary. SFB should be consulted on the need for additional measures for pier construction as needed during construction.

#### **4.2.3 Seismic Design Criteria**

The following parameters were calculated using the U.S. Seismic Design Map program<sup>9</sup>, and were based on the site being located at approximate latitude 37.935°N and longitude 121.944°W. For seismic design using the 2019 California Building Code (CBC), we recommend the following seismic design parameters be used. These values are based on applying the ASCE 7-16 model and assuming the structures are categorized as Risk Category II.

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<sup>9</sup><https://seismicmaps.org/> (accessed 2/28/20)

Seismic Design Parameter	Design Value
Site Class	C
$S_s$	2.275
$S_1$	0.665
$S_{MS}$	2.731
$S_{M1}$	0.931
$S_{DS}$	1.820
$S_{D1}$	0.621
SDC	D
$F_a$	1.2
$F_v$	1.4
$PGA_M$	1.09

### 4.3 Pavements

Based on the results of laboratory testing of onsite materials, we recommend that an R-value of 5 be used in preliminary asphalt concrete pavement design. We recommend additional R-value tests be performed once the pavement subgrade is established to confirm the R-value used in the design. Pavement subgrade completely composed of sandy and gravelly fills will result in higher R-values and thinner pavement sections.

We developed the following alternative preliminary pavement sections using Topic 608 of the State of California Department of Transportation Highway Design Manual, the recommended R-value, and typical traffic indices for residential developments. The project's Civil Engineer or appropriate public agency should determine actual traffic indices. The pavement thicknesses shown below are SFB's recommended minimum values; governing agencies may require pavement thicknesses greater than those shown.

<b>PRELIMINARY PAVEMENT DESIGN ALTERNATIVES</b>			
<b>SUBGRADE R-VALUE = 5</b>			
Location	Pavement Components		Total Thickness (inches)
	Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)	
T.I. = 4.5 (auto & light truck parking)	3.0	9.0	12.0
T.I. = 5.0 (access ways/courts)	3.0	11.0	14.0

If the pavements are planned to be placed prior to or during construction, the traffic indices and pavement sections may not be adequate for support of what is typically more frequent and heavier construction traffic. If the pavement sections will be used for construction access by heavy trucks or construction equipment (especially fork lifts with support footings), SFB should be consulted to provide recommendations for alternative pavement sections capable of supporting the heavier use and heavier loads. If requested, SFB can provide recommendations for a phased placement of the asphalt concrete to reduce the potential for mechanical scars caused by construction traffic in the finished grade. Preliminary pavement sections should be revised, if necessary, when actual traffic indices are known and pavement subgrade elevations are determined.

Pavement baserock and asphalt concrete should be compacted to at least 95 percent relative compaction. The asphalt concrete compacted unit weight should be determined using Caltrans Test Method 308-A or ASTM Test Method D1188. Asphalt concrete should also satisfy the S-value requirements by Caltrans.

We recommend regular maintenance of the asphalt concrete be performed at approximately five-year intervals. Maintenance may include sand slurry sealing, crack filling, and chip seals as necessary. If regular maintenance is not performed, the asphalt concrete layer could experience premature degradation requiring more extensive repairs.

## **5.0 CONDITIONS AND LIMITATIONS**

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SFB is not responsible for the validity or accuracy of information, analyses, test results, or designs provided to SFB by others or prepared by others. The analysis, designs, opinions, and recommendations submitted in this report are based in part upon the data obtained from our field work and upon information provided by others. Site exploration and testing characterizes subsurface conditions only at the locations where the explorations or tests are performed; actual subsurface conditions between explorations or tests may be different than those described in this report. Variations of subsurface conditions from those analyzed or characterized in this report are not uncommon and may become evident during construction. In addition, changes in the condition of the site can occur over time as a result of either natural processes (such as earthquakes, flooding, or changes in ground water levels) or human activity (such as construction adjacent to the site, dumping of fill, or excavating). If changes to the site's surface or subsurface conditions occur since the performance of the field work described in this report, or if differing subsurface conditions are encountered, we should be contacted immediately to evaluate the differing conditions to assess if the opinions, conclusions, and recommendations provided in this report are still applicable or should be amended.

We recommend SFB be retained to provide geotechnical services during design, reviews, earthwork operations, paving operations, and foundation installation to confirm and observe compliance with the design concepts, specifications and recommendations presented in this report. Our presence will also allow us to modify design if unanticipated subsurface conditions are encountered or if changes to the scope of the project, as defined in this report, are made.

This report is a design document that has been prepared in accordance with generally accepted geological and geotechnical engineering practices for the exclusive use of DeNova Homes and their consultants for specific application to the proposed Mitchell Canyon Road residential subdivision development project in Clayton, California, and is intended to represent our design recommendations to DeNova Homes for specific application to the subdivision project. The conclusions and recommendations contained in this report are solely professional opinions. It is the responsibility of DeNova Homes to transmit the information and recommendations of this report to those designing and constructing the project. We will not be responsible for the misinterpretation of the information provided in this report. We recommend SFB be retained to review geological and geotechnical aspects of the construction calculations, specifications, and plans; we should also be retained to participate in prebid and preconstruction conferences to clarify the opinions, conclusions, and recommendations contained in this report.

It should be understood that advancements in the practice of geotechnical engineering and engineering geology, or discovery of differing surface or subsurface conditions, may affect the



validity of this report and are not uncommon. SFB strives to perform its services in a proper and professional manner with reasonable care and competence but we are not infallible. Geological engineering and geotechnical engineering are disciplines that are far less exact than other engineering disciplines; therefore we should be consulted if it is not completely understood what the limitations to using this report are.

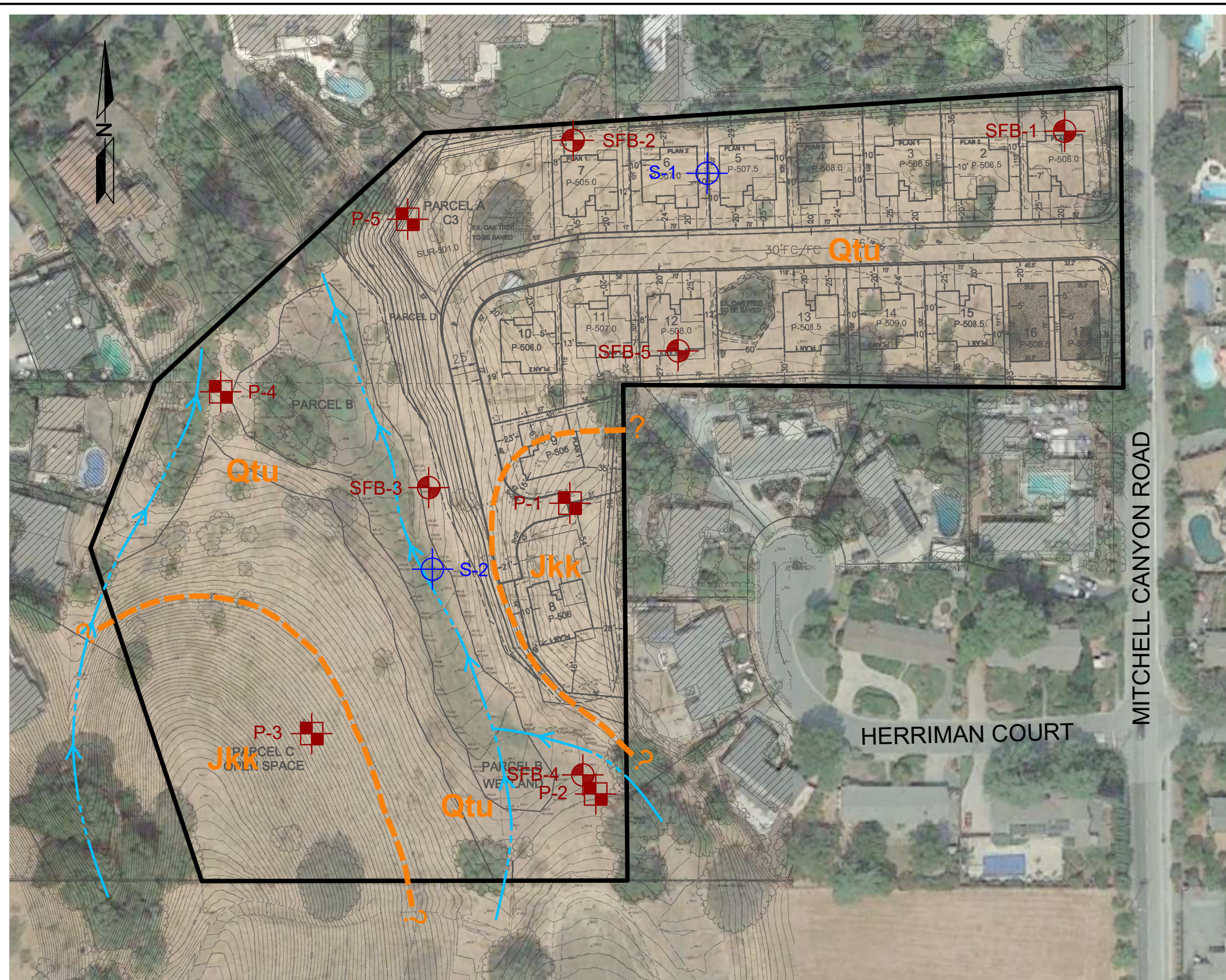
In the event that there are any changes in the nature, design or location of the project, as described in this report, or if any future additions are planned, the conclusions and recommendations contained in this report shall not be considered valid unless we are contacted in writing, the project changes are reviewed by us, and the conclusions and recommendations presented in this report are modified or verified in writing. The opinions, conclusions, and recommendations contained in this report are based upon the description of the project as presented in the introduction section of this report.

This report does not necessarily represent all of the information that has been communicated by us to DeNova Homes and their consultants during the course of this engagement and our rendering of professional services to DeNova Homes. Reliance on this report by parties other than those described above must be at their own risk unless we are first consulted as to the parties' intended use of this report and only after we obtain the written consent of DeNova Homes to divulge information that may have been communicated to DeNova Homes. We cannot accept consequences for use of segregated portions of this report.

Please refer to Appendix D for additional guidelines regarding use of this report.

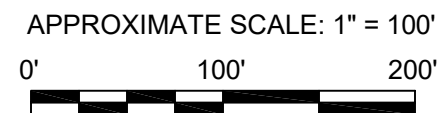
## FIGURES

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- KEY\***
- PROJECT LIMIT
  - P-5 SFB EXPLORATORY PIT (8/26/19)
  - SFB-5 SFB EXPLORATORY BORING (8/19/19)
  - S-2 PREVIOUS EXPLORATORY BORING (ABEL SOARES, 1976)
  - Qtu PLIO-PLEISTOCENE GRAVELLY SOILS
  - Jkk KNOXVILLE FORMATION SANDSTONE
  - ?- - - - ? GEOLOGIC CONTACT; QUERIED WHERE NOT MAPPED
  - EPHEMERAL DRAINAGE CHANNEL
- \*ALL LOCATIONS ARE APPROXIMATE

BASE: Overlaid project conceptual site plan prepared by Meridian Associates, Inc. and dated 1/20/20 on a Google Earth image dated 8/31/17.



DATE  
February 2020

PROJECT NO.  
155-90

**Stevens**  
**S**terrone &  
**B**ailey  
Engineering Company, Inc

1600 Willow Pass Court  
Concord, CA 94520  
Tel 925.688.1001  
Fax 925.688.1005  
www.SFandB.com

SITE PLAN & ENGINEERING GEOLOGY MAP

FIGURE

MITCHELL CANYON ROAD  
Clayton, California

1

**APPENDIX A**  
Field Investigation

---

**APPENDIX A**  
Field Investigation

Our field investigation for the proposed residential subdivision development to be located west of Mitchell Canyon Road in Clayton, California, consisted of surface reconnaissance and a subsurface exploration program. Geotechnical reconnaissance of the site and surrounding area was performed on August 14, 2019. Subsurface exploration was performed using a truck-mounted drill rig equipped with 4-inch diameter, continuous flight, solid stem augers and a Cat 430F2 backhoe. Five exploratory borings were drilled on August 19, 2019 to a maximum depth of about 21 feet below existing grade. Five exploratory test pits were excavated on August 26, 2019 to a maximum depth of about 6 feet below existing grade. Our representatives continuously logged the soils encountered in the borings and the pits in the field. The soils are described in general accordance with the Unified Soil Classification System (ASTM D2487). The logs of the borings and pits, as well as, a key for the classification of the soil (Figure A-1) and rocks mass characteristics (Figure A-2) are included as part of this appendix.

Representative samples were obtained from our exploratory borings and pits at selected depths appropriate to the investigation. Relatively undisturbed samples were obtained using a 3-inch O.D. split barrel sampler with liners, and disturbed samples were obtained using the 2-inch O.D. split spoon sampler. All samples were transmitted to our offices for evaluation and appropriate testing. Both sampler types are indicated in the "Sampler" column of the boring logs as designated in Figure A-1.

Resistance blow counts were obtained in our borings with the samplers by dropping a 140-pound safety hammer through a 30-inch free fall. The sampler was driven 18 inches and the number of blows were recorded for each 6 inches of penetration. The blows per foot recorded on the boring logs represent the accumulated number of converted blows that were required to drive the last 12 inches, or the number of inches indicated where hard resistance was encountered. The blow counts recorded on the boring logs have been converted to equivalent SPT field blow-counts, but have not been corrected for overburden, silt content, or other factors.

The attached boring and pit logs and related information show our interpretation of the subsurface conditions at the dates and locations indicated, and it is not warranted that they are representative of subsurface conditions at other locations and times.

## UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		grf	ltr	Description	Major Divisions	grf	ltr	Description
Coarse Grained Soils	Gravel	●	GW	Well-graded gravels or gravel sand mixtures, little or no fines	Soils	Sils And Clays LL < 50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			GP	Poorly-graded gravels or gravel sand mixture, little or no fines			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		○	GM	Silty gravels, gravel-sand-silt mixtures			OL	Organic silts and organic silt-clays of low plasticity
			GC	Clayey gravels, gravel-sand-clay mixtures			Sils And Clays LL > 50	MH
	Sand And Sandy Soils	SW	Well-graded sands or gravelly sands, little or no fines	CH		Inorganic clays of high plasticity, fat clays		
		SP	Poorly-graded sands or gravelly sands, little or no fines	OH		Organic clays of medium to high plasticity		
		SM	Silty sands, sand-silt mixtures	Highly Organic Soils		PT		Peat and other highly organic soils
		SC	Clayey sands, and-clay mixtures					

### GRAIN SIZES

U.S. STANDARD SERIES SIEVE				CLEAR SQUARE SIEVE OPENINGS			
200	40	10	4	3/4"	3"	12"	
Sils and Clays	Sand			Gravel		Cobbles	Boulders
	Fine	Medium	Coarse	Fine	Coarse		

### RELATIVE DENSITY

Sands and Gravels	Blows/Foot*
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Over 50

### CONSISTENCY

Sils and Clays	Blows/Foot*	Strength (tsf)**
Very Soft	0 - 2	0 - 1/4
Soft	2 - 4	1/4 - 1/2
Firm	4 - 8	1/2 - 1
Stiff	8 - 16	1 - 2
Very Stiff	16 - 32	2 - 4
Hard	Over 32	Over 4

\*Number of Blows for a 140-pound hammer falling 30 inches, driving a 2-inch O.D. (1-3/8" I.D.) split spoon sampler.  
 \*\*Unconfined compressive strength.

### SYMBOLS & NOTES

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li> Standard Penetration sampler (2" OD Split Barrel)</li> <li> Modified California sampler (3" OD Split Barrel)</li> <li> California Sampler (2.5" OD Split Barrel)</li> <li> Ground Water level initially encountered</li> <li> Ground Water level at end of drilling</li> </ul> | <ul style="list-style-type: none"> <li> Shelby Tube</li> <li> Pitcher Barrel</li> <li> HQ Core</li> </ul> |
|--|---|

### Increasing Visual Moisture Content

- ↑ Saturated  
Wet  
Moist  
Damp  
Dry

### Constituent Percentage

- |       |        |
|-------|--------|
| trace | <5%    |
| some  | 5-15%  |
| with  | 16-30% |
| -y    | 31-49% |

## KEY TO EXPLORATORY BORING LOGS

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	FIGURE NO.
<b>155-90</b>	<b>February 2020</b>	<b>A-1</b>

Stevens,  
Ferrone &  
Bailey

Engineering Company, Inc.

1600 Willow Pass Court  
Concord, CA 94520  
Tel: (925) 688-1001

# ROCK MASS CHARACTERISTICS

## WEATHERING

- FRESH** - Rock fresh, crystals bright, few joints may show slight staining. Rock rings under hammer blows if crystalline.
- VERY SLIGHT** - Rock generally fresh, joints stained, some joints may show thin clay coatings, crystals in broken face show bright. Rings under hammer blows if crystalline.
- SLIGHT** - Rock generally fresh, joints stained, and discoloration extends into rock up to 1 inch. Joints may contain clay. In granitoid rocks, some occasional feldspar crystals are dull and discolored. Crystalline rock rings under hammer blows.
- MODERATE** - Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some show clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.
- MODERATELY SEVERE** - All rock except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. Rock goes "clunk" when struck.
- SEVERE** - All rock except quartz discolored or stained. Rock "fabric" clear and evident, but reduced in strength to strong soil. In some granitoid rocks, all feldspars kaolinized to some extent. Some fragments of strong rock usually remain.
- VERY SEVERE** - All rock except quartz discolored or stained. Rock "fabric" discernible, but rock mass effectively reduced to "soil" with only fragments of strong rock remaining.
- COMPLETE** - Rock reduced to "soil." Rock "fabric" not discernible or discernible only in small scattered locations. Quartz may be present as dikes or stringers.

## STRENGTH

- VERY STRONG** - Resists breakage from hammer blows; but will yield dust and small chips.
- STRONG** - Withstands a few hammer blows; but will yield large fragments.
- MODERATELY STRONG** - Withstands a few firm hammer blows.
- WEAK** - Crumbles with light hammer blows.
- FRIABLE** - Can be broken down with hand and finger pressure.
- LOW** - Soil-like strength

## DISCONTINUITY SPACING

<u>JOINTS</u>	<u>BEDDING, CLEAVAGE, FOLIATION</u>		
CRUSHED	Very Laminated	Less than 1/2 inch	Less than 1.3 cm
INTENSELY	Laminated	1/2 to 1 inch	1.3 cm to 2.5 cm
VERY CLOSE	Very Thin	1 to 2 inches	2.5 cm to 5 cm
CLOSE	Thin	2 inches to 1 foot	5 cm to 30 cm
MODERATELY CLOSE	Medium	1 foot to 3 feet	30 cm to 1 m
WIDE	Thick	3 feet to 10 feet	1 m to 3 m
VERY WIDE	Very Thick	Greater than 10 feet	Greater than 3 m

## HARDNESS

- VERY HARD** - Cannot be scratched with a knife; metal powder left on sample.
- HARD** - Scratched with knife with difficulty; trace of metal powder left on samples; scratch faintly visible.
- MODERATELY HARD** - Readily scratched with knife, scratch leaves heavy trace of dust and is readily visible.
- LOW HARDNESS** - Gouged or grooved to 1/16 inch by firm pressure on knife; scratches with penny.
- SOFT** - Gouged or grooved readily with a knife; small thin pieces can be grooved by finger pressure.
- VERY SOFT** - Carves with knife; scratched by fingernail.

## ROUGHNESS OF DISCONTINUITY SURFACES

- SMOOTH** - Appears smooth and is essentially smooth to the touch. May be slickensided.
- SLIGHTLY ROUGH** - Asperities on the fracture are clearly visible.
- MEDIUM ROUGH** - Asperities are clearly visible and fracture surface feels abrasive.
- ROUGH** - Large angular asperities can be seen. Some ridge and high side angle steps are evident.
- VERY ROUGH** - Near vertical steps and ridges occur on the fracture surface.

ROCK CLASSIFICATION 155-90 PITS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



1600 Willow Pass Court  
Concord, CA 94520  
Tel: (925) 688-1001

## KEY TO ROCK CHARACTERISTICS

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	FIGURE NO.
<b>155-90</b>	<b>February 2020</b>	<b>A-2</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS	
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE								
CLAY (CL), reddish-brown, silty, with sand(fine- to medium-grained), trace gravel(fine, subangular to subrounded), with rootlets, dry.	very stiff		0						At 2 feet: Liquid Limit = 32% Plasticity Index = 14 Fine Gravel = 4% Coarse Sand = 4% Medium Sand = 6% Fine Sand = 12% Silt = 38% Clay = 36%	
Change color to mottled reddish-brown with black streaks, some sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), with sand clasts.	hard					16	12	100		3.5
	very stiff			5		23	18	109		
CLAY (CL), mottled brown, silty, with sand(fine- to medium-grained), with gravel(fine, subangular to subrounded), dry to damp.	hard			10		68/11"				
With rock fragments.										
SAND (SC), yellowish-brown, fine- to coarse-grained, with clay, some to with gravel(fine, subangular to subrounded), some silt, damp to moist. Some clay, damp.	dense		15		30/3"					
CLAY (CL), brown, silty, with sand(fine- to coarse-grained), damp.	hard		20		50/6"					
Bottom of Boring = 21 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.										

EXPLORATORY BORING LOG 155-90-GP-J STEVENS FERRONE BAILEY.GDT 2/28/20



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Concord, CA 94520  
Tel: (925) 688-1001








**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-1</b>



DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), reddish-brown, silty, with sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), with sand clasts, damp.  Change color to mottled reddish-brown and light brown, dry to damp.	very stiff		0		16	19	104	6.3	
	hard			52					
			5		30/6"				
			10		30/4"				
SAND (SC), yellowish-brown, fine- to coarse-grained, some clay, trace silt, trace gravel(fine, subangular to subrounded), damp.	dense to very dense		15		50/6"				
Bottom of Boring = 16 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			20						

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



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Concord, CA 94520  
Tel: (925) 688-1001

**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-2</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER 10 feet	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), brown, silty, some sand(fine- to coarse-grained), dry to damp.	very stiff		0		16	26	93	6.0	
CLAY (CL), mottled reddish-brown and light brown, silty, with sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), damp.	very stiff		5		36	23	100	5.9	
CLAY (CL), yellowish-brown, silty, with sand(fine- to medium-grained), with carbonates, damp.	hard		10		53				
CLAY (CL), mottled olive and yellowish-brown, silty, some sand(fine- to coarse-grained), with rock fragments, damp to moist. Thin lense of rock at 11 feet.	hard		15		50/6"				
SAND (SC), brown, fine- to coarse-grained, with clay, some silt, with rock fragments, moist to wet.	dense to very dense		20						
Drilling refusal at 17 feet.									
Bottom of Boring = 17 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.									

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20






1600 Willow Pass Court  
Concord, CA 94520  
Tel: (925) 688-1001

**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-3</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), yellowish-brown, silty, sandy(fine- to coarse-grained), dry.	hard		0						
GRAVEL (GM), drilling refusal.	dense				30/6" 50/2"				
Bottom of Boring = 2.5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20





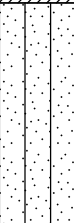



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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-4</b>

DRILL RIG Mobile B-24, CFA	SURFACE ELEVATION ---	LOGGED BY HP
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 4-inch	DATE DRILLED 08/19/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), yellowish-brown, silty, with sand(fine- to coarse-grained), some gravel(fine, subangular to subrounded), dry.  With rock fragments.  Change color to mottled reddish-brown and light brown, sandy(fine- to coarse-grained).	very stiff  hard		0		30/6" 50/5"	14	110	7.1	
SAND (SM), yellowish-brown, fine- to medium-grained, silty, with gravel(fine, subangular to subrounded), trace clay, with rock fragments, dry to damp.	dense to very dense		10		50/6"	9			
GRAVEL (GM), drilling refusal. Bottom of Boring = 12.5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			15		50/6"				

EXPLORATORY BORING LOG 155-90.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20




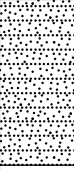
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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>SFB-5</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
SILT (ML), brown, sandy(fine-grained), some clay, dry.	soft		0						
SANDSTONE, mottled brown-black-gray, some clay coated surfaces, deeply to moderately weathered, low hardness, very closely fractured, chaotic fracture orientation, damp.	friable to moderately strong		5						
Bottom of Boring = 5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20





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Concord, CA 94520  
Tel: (925) 688-1001

**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-1</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
CLAY (CL), brown, with silt, with sand(fine- to coarse-grained), trace gravel(fine to coarse, subangular to subrounded), damp.	stiff		0						Bag sample at 1-2 feet At 1-2 feet: Liquid Limit = 58% Plasticity Index = 39 Fine Gravel = 1% Coarse Sand = 3% Medium Sand = 6% Fine Sand = 10% Silt = 22% Clay = 58% Bag sample at 3 feet
GRAVEL (GM), mottled grayish-brown, fine to coarse, subangular to subrounded, sandy(fine- to coarse-grained), silty, damp.	medium dense								
Bottom of Boring = 5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20





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 Tel: (925) 688-1001

**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
 Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-2</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
SILT (ML), brown, trace to some clay, trace sand(fine-grained), dry to damp.	soft		0						Bag sample at 1-3 feet
SANDSTONE, mottled dark brown, clay coated surfaces, deeply to moderately weathered, low hardness, very closely fractured, chaotic fracture orientation, damp. Bottom of Boring = 5 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.	friable to moderately strong		5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20






1600 Willow Pass Court  
Concord, CA 94520  
Tel: (925) 688-1001

**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-3</b>

DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
SILT (ML), brown, some clay, trace sand(fine-grained), trace roots, dry.	soft		0						
CLAY (CL)/SILT (ML), mottled brown, some sand(fine-to coarse-grained), some gravel(fine to coarse, subangular to subrounded), with tree roots to 3', damp.	stiff								
Change color to reddish-brown, increasing clay content with depth.	very stiff		5						
Bottom of Boring = 6 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



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**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-4</b>



DRILL RIG CAT 430F2	SURFACE ELEVATION ---	LOGGED BY KF
DEPTH TO GROUND WATER Not Encountered	BORING DIAMETER 24-inch	DATE DRILLED 08/26/19

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UNC. COMP. (KSF)	OTHER TESTS
DESCRIPTION AND REMARKS	CONSIST	SOIL TYPE							
GRAVEL (GM), reddish-brown, fine to coarse, subangular to subrounded, with sand(fine- to coarse-grained), with silt, some clay, trace cobbles, damp.	medium dense		0						
Bottom of Boring = 6 feet Notes: Stratification is approximate, variations must be expected. Blowcounts converted to SPT N-values. See Report for additional details.			5						
			10						
			15						
			20						

EXPLORATORY BORING LOG 155-90 PITTS.GPJ STEVENS FERRONE BAILEY.GDT 2/28/20



1600 Willow Pass Court  
Concord, CA 94520  
Tel: (925) 688-1001

**EXPLORATORY BORING LOG**

**MITCHELL CANYON ROAD  
Clayton, California**

PROJECT NO.	DATE	BORING NO.
<b>155-90</b>	<b>February 2020</b>	<b>P-5</b>

**APPENDIX B**  
Laboratory Investigation

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**APPENDIX B**  
Laboratory Investigation

Our laboratory testing program for the proposed residential subdivision development to be located west of Mitchell Canyon Road in Clayton, California was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site.

The natural water content was determined on nine samples of the subsurface soils. The water contents are recorded on the boring logs at the appropriate sample depths.

Dry density determination was performed on six samples of the subsurface soils to evaluate their physical properties. The results of the tests are shown on the boring logs at the appropriate sample depths.

Atterberg Limit determinations were performed on two samples of the subsurface soils to determine the range of water content over which these materials exhibit plasticity. These values are used to classify the soil in accordance with the Unified Soil Classification System and to indicate the soil's compressibility and expansion potentials. The results of these tests are presented on the boring and pit log at the appropriate sample depth and are also attached to this appendix.

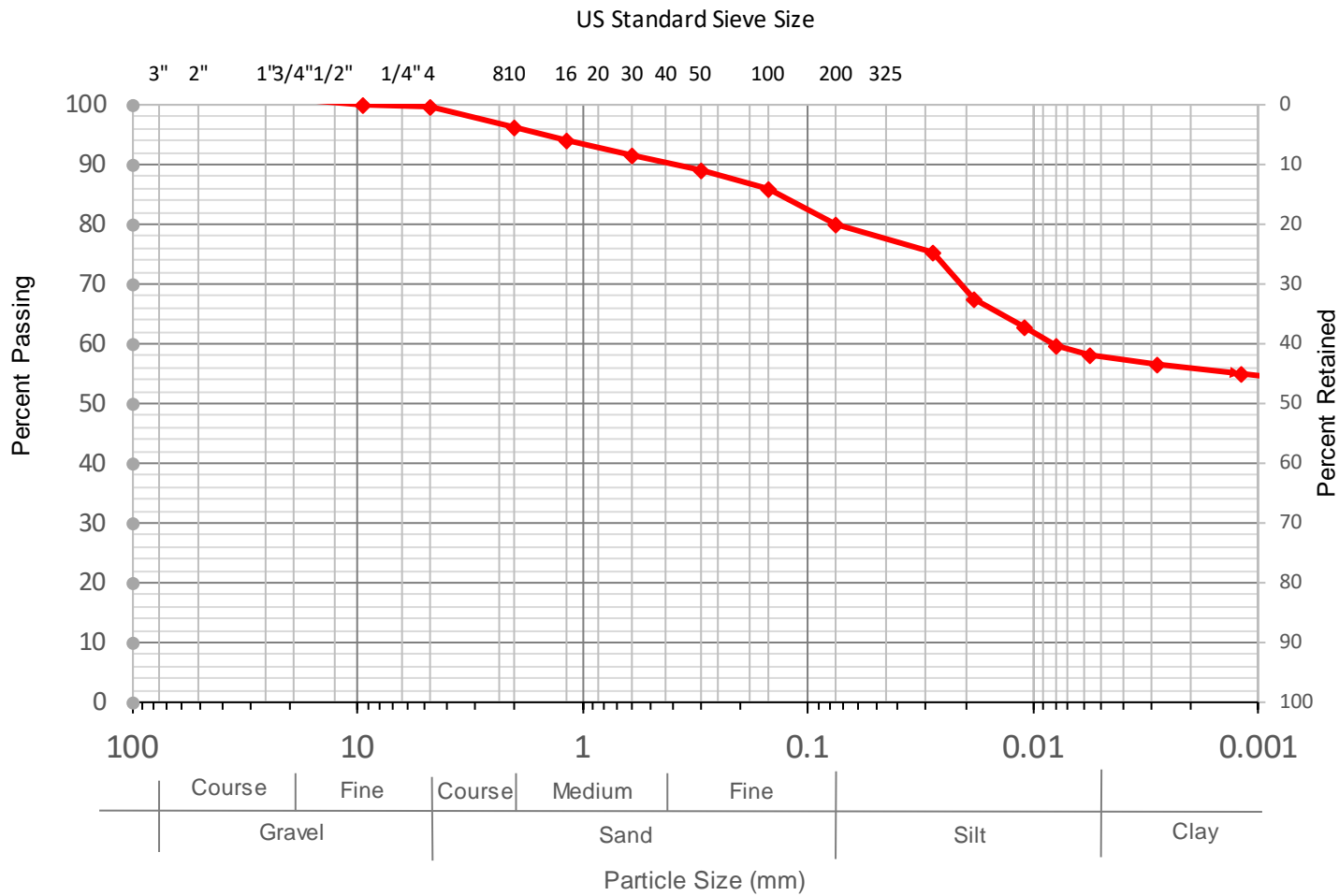
Gradation and hydrometer tests were performed on two samples of the subsurface soils. These tests were performed to assist in the classification of the soils and to determine their grain size distribution. The results of the tests are presented on the boring and pit log at the appropriate sample depth and are also attached to this appendix.

Unconfined compression tests were performed on five relatively undisturbed samples of the subsurface soils to evaluate the undrained shear strengths of these materials. Failure was taken as the peak normal stress. The results of the tests are presented on the boring logs at the appropriate sample depths and are also attached to this appendix.

Four onsite soil samples were tested for pH (ASTM D4972), chlorides (ASTM D4327), sulfates (ASTM D4327), sulfides (ASTM D4658M), resistivity at 100% saturation (ASTM G57), and Redox potential (ASTM D1498) for use in evaluating the potential for corrosion on concrete and buried metal such as utilities and reinforcing steel. The results of these tests are included in this appendix. We recommend these test results be forwarded to your underground contractors, pipeline designers, and foundation designers and contractors.

Hydrometer Analysis – ASTM D422

**Project Number:** 155-90      **Project Name:** Mitchell Canyon  
**Sample Number:** P-2      **Description:** Brown silty CLAY with sand (CH)  
**Depth :** 1'-2'      **Test Date:** 08-27-19      **Tested By:** R



Composite Sieve Data

Standard Sieve Size	Percent Passing
3"	
1.5"	
3/4"	
3/8"	100
#4	99.8
#10	96.3
#16	94.1
#30	91.4
#50	88.9
#100	85.8
#200	80.1

Particle Diameter (mm)	Percent Soil in Suspension
0.0280	75.4
0.0185	67.6
0.0110	62.8
0.0079	59.7
0.0056	58.1
0.0028	56.6
0.0012	55.0

UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-5

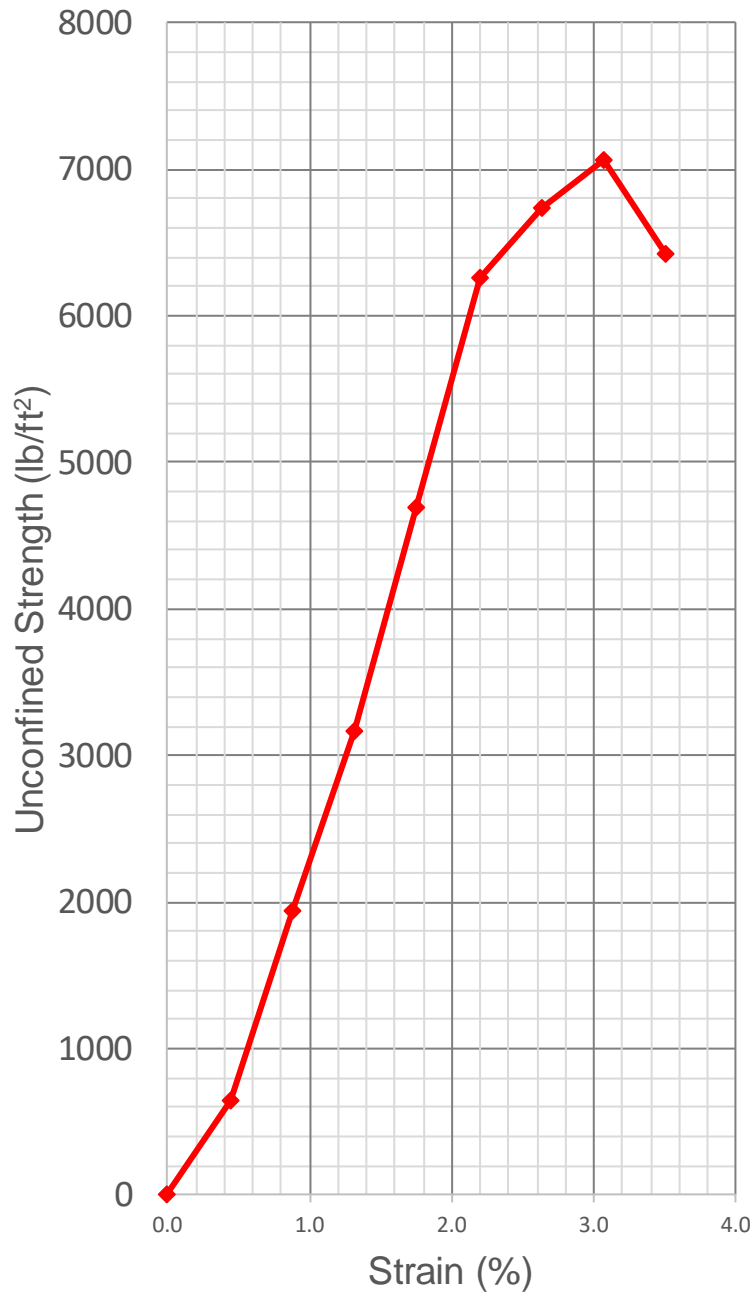
**Depth :** 1.5

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Red brown silty CLAY with sand and shale some gravel (CL)

**Tested By:** R



Soil Specimen Initial Measurements	
Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.7 in
Volume	0.01517 ft <sup>3</sup>
Water Content	14.1 %
Wet Density	125.0 pcf
Dry Density	109.6 pcf

Max Unconfined Compressive Strength	
Elapsed Time	3.5 min
Vertical Dial	0.175 in
Strain	3.1 %
Area	0.03296 ft <sup>2</sup>
Axial Load	232.8 lbs
Compressive Strength	7,064 psf

UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-3

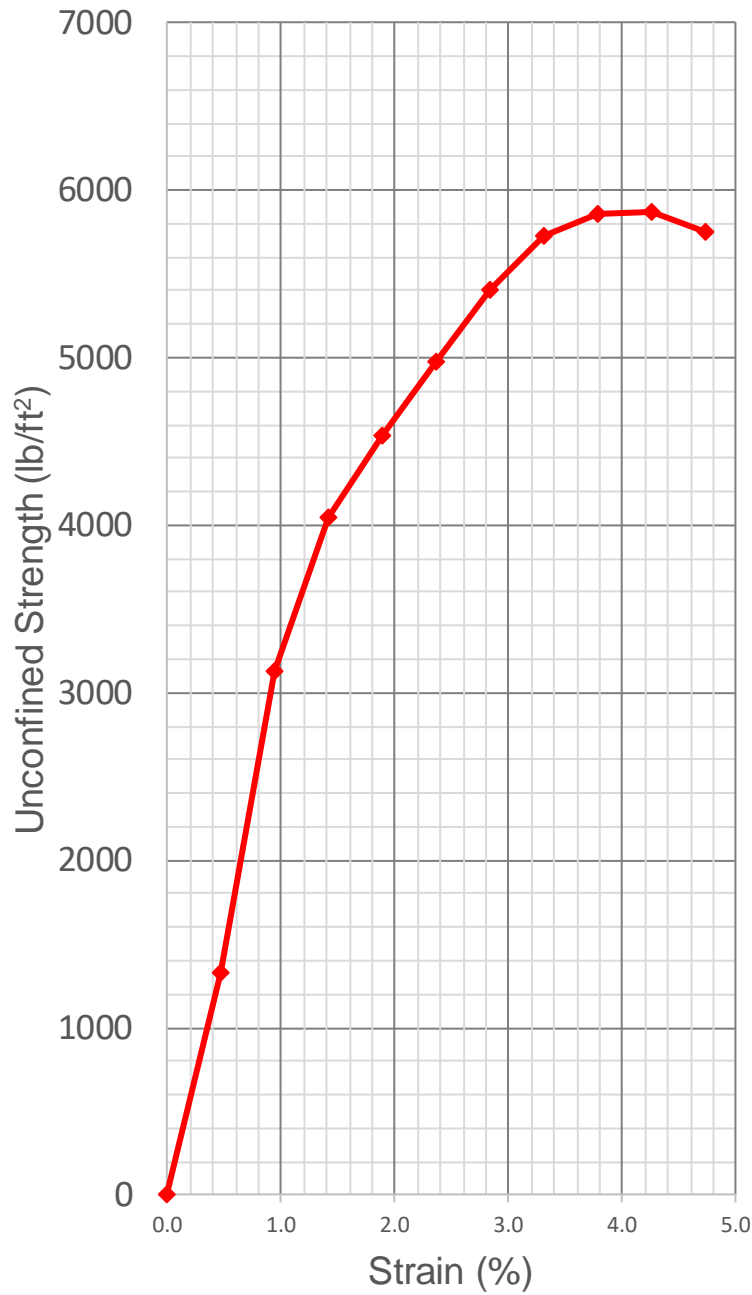
**Depth :** 6

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Brown silty CLAY with sand (CL)

**Tested By:** R



Soil Specimen Initial Measurements

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.29 in
Volume	0.01408 ft <sup>3</sup>
Water Content	22.8 %
Wet Density	123.2 pcf
Dry Density	100.3 pcf

Max Unconfined Compressive Strength

Elapsed Time	4.5 min
Vertical Dial	0.225 in
Strain	4.3 %
Area	0.03336 ft <sup>2</sup>
Axial Load	196.0 lbs
Compressive Strength	5,875 psf

UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-3

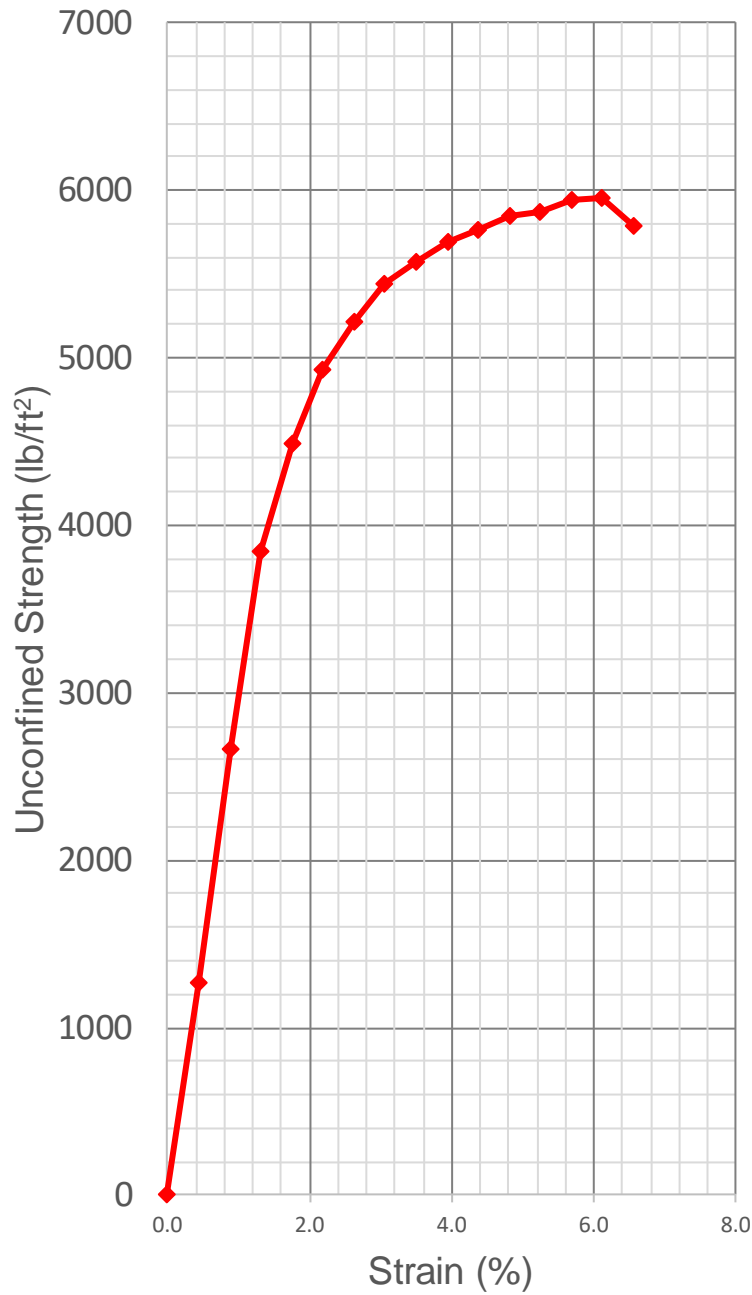
**Depth :** 2

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Dark brown silty CLAY some sand (CL)

**Tested By:** R



Soil Specimen Initial Measurements

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.72 in
Volume	0.01523 ft <sup>3</sup>
Water Content	26.1 %
Wet Density	116.6 pcf
Dry Density	92.5 pcf

Max Unconfined Compressive Strength

Elapsed Time	7 min
Vertical Dial	0.35 in
Strain	6.1 %
Area	0.03403 ft <sup>2</sup>
Axial Load	202.7 lbs
Compressive Strength	5,957 psf

UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-2

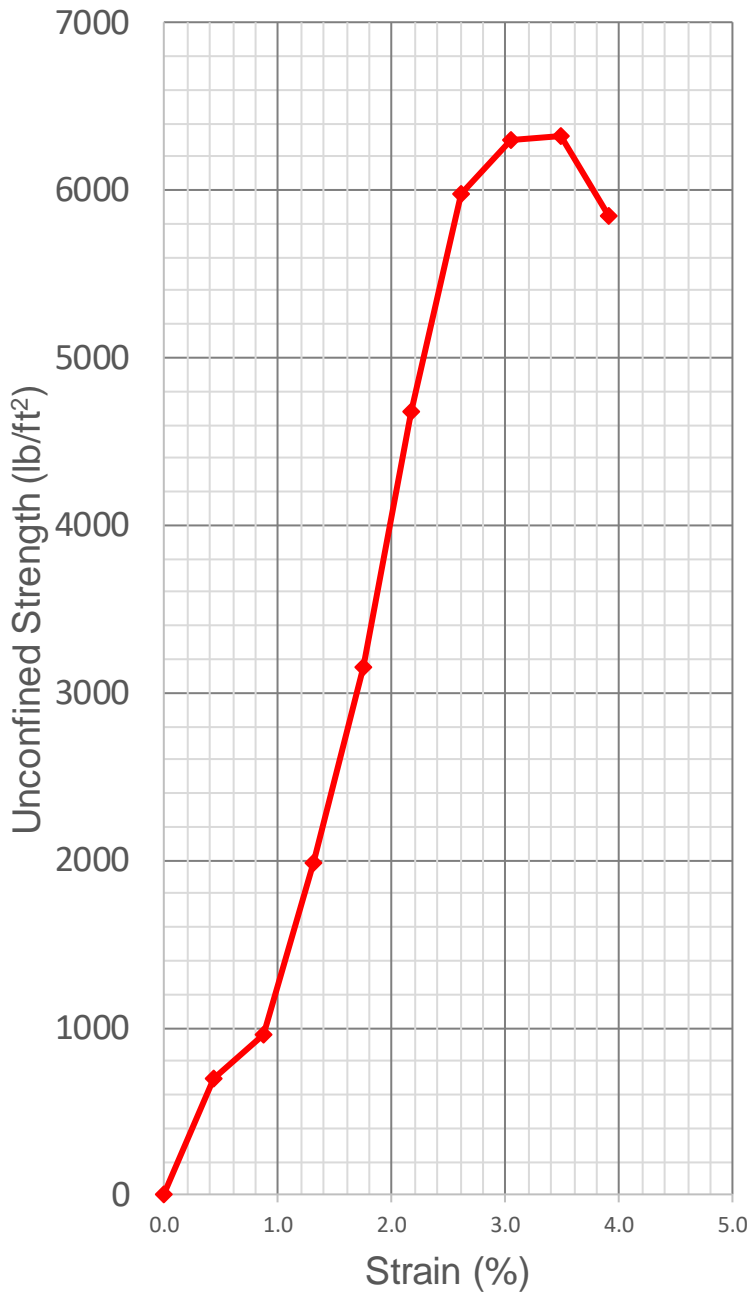
**Depth :** 2

**Project Name:** Mitchell Canyon

**Date:** 8/21/2019

**Description:** Red brown silty CLAY with sand some gravel (CL)

**Tested By:** R



Soil Specimen Initial  
 Measurements

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	5.75 in
Volume	0.01531 ft <sup>3</sup>
Water Content	19.2 %
Wet Density	124.3 pcf
Dry Density	104.3 pcf

Max Unconfined  
 Compressive Strength

Elapsed Time	4 min
Vertical Dial	0.2 in
Strain	3.5 %
Area	0.03310 ft <sup>2</sup>
Axial Load	209.4 lbs
Compressive Strength	6,327 psf



UNCONFINED COMPRESSIVE STRENGTH – D2166

**Project Number:** 155-90

**Boring #:** SFB-1

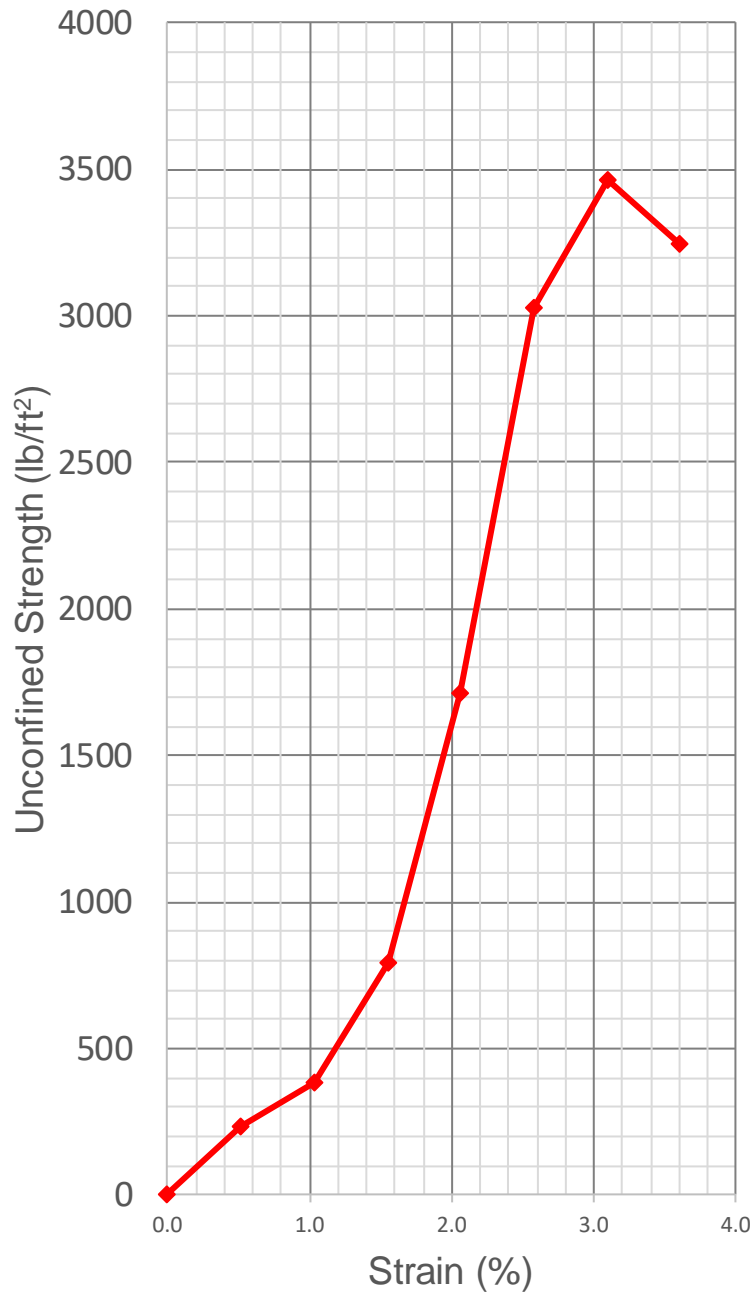
**Depth :** 2

**Project Name:** Mitchell Canyon

**Date:** 8/20/2019

**Description:** Red brown silty CLAY with sand trace gravel (CL)

**Tested By:** R



Soil Specimen Initial  
 Measurements

Diameter	2.42 in
Initial Area	4.60 in <sup>2</sup>
Initial Length	4.85 in
Volume	0.01291 ft <sup>3</sup>
Water Content	12.4 %
Wet Density	112.7 pcf
Dry Density	100.3 pcf

Max Unconfined  
 Compressive Strength

Elapsed Time	3 min
Vertical Dial	0.15 in
Strain	3.1 %
Area	0.03296 ft <sup>2</sup>
Axial Load	114.3 lbs
Compressive Strength	3,467 psf

Atterberg Limits Test – ASTM D4318

**Project Number:** 155-90

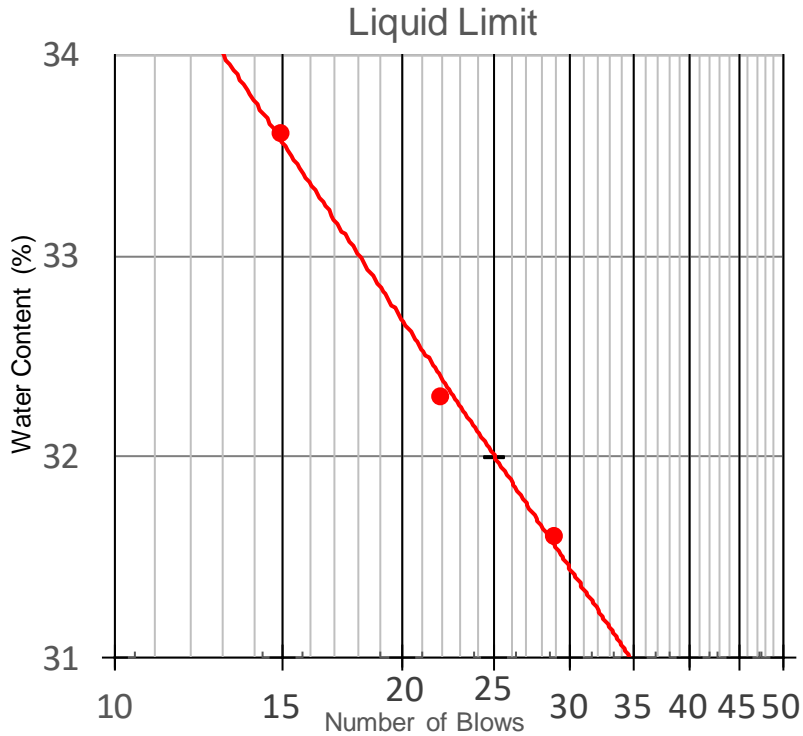
**Project Name:** Mitchell Canyon

**Boring/Sample No:** SFB-1 **Depth:** 2

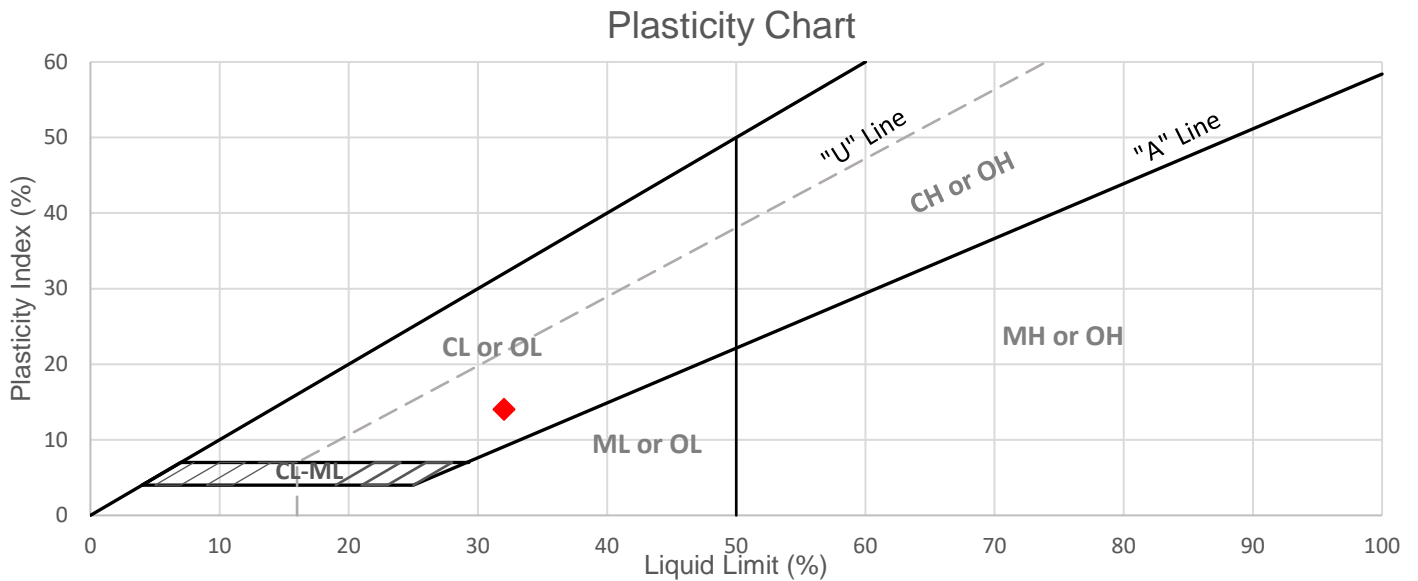
**Date:** 08-22-19

**Description of Sample:** Red brown silty CLAY with sand trace gravel (CL)

**Tested By** R

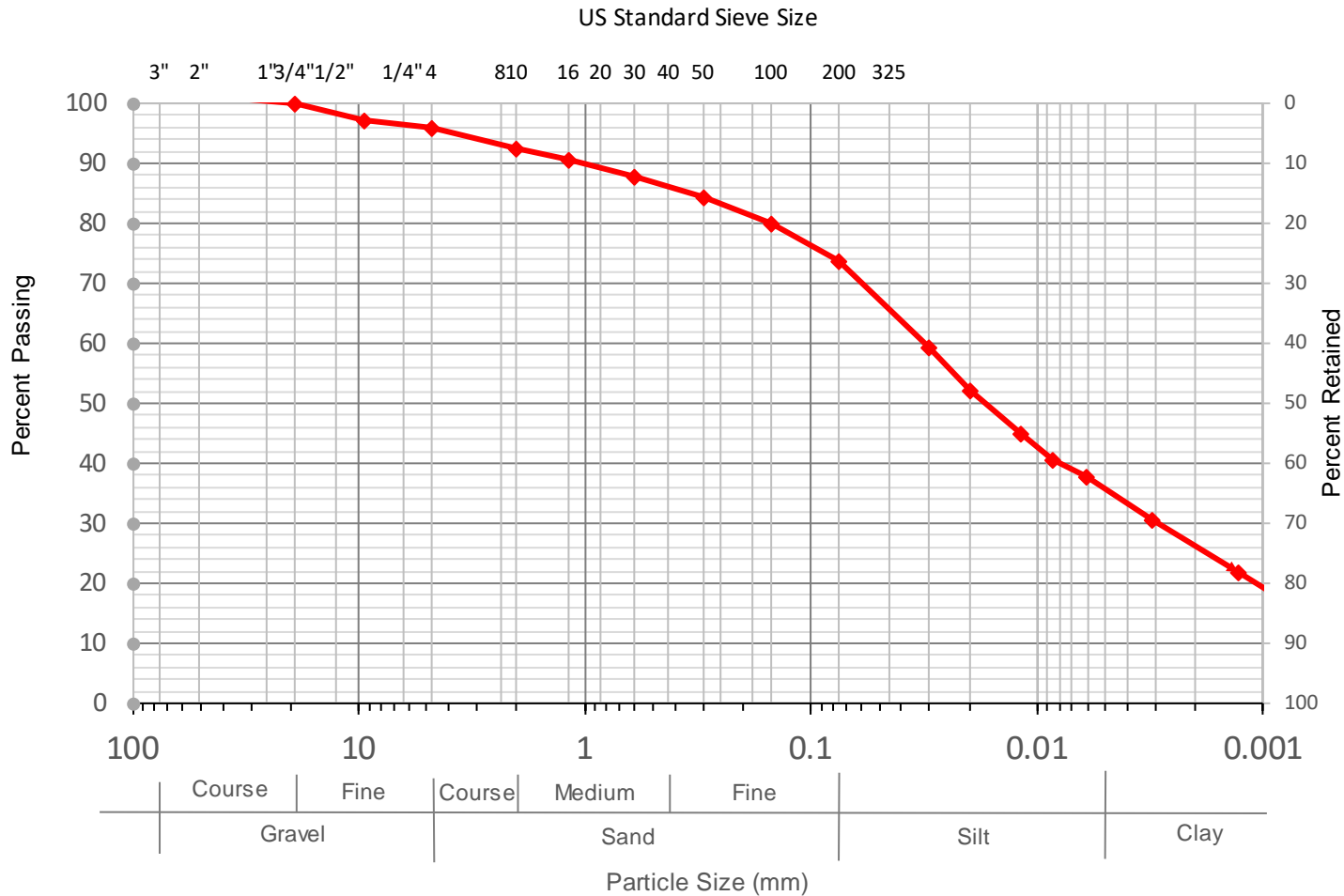


Plastic Limit Data			
Trial	1	2	Ave
Water Content (%)	17.4	17.6	17.5
Data Summary			
Liquid Limit	<b>32</b>		
Plastic Limit	<b>18</b>		
Plasticity Index	<b>14</b>		
Natural Water Content	<b>12.4</b>		
Liquidity Index	<b>-0.400</b>		
% Passing #200 Sieve	<b>73.7</b>		



Hydrometer Analysis – ASTM D422

**Project Number:** 155-90      **Project Name:** Mitchell Canyon  
**Sample Number:** SFB-1      **Description:** Red brown silty CLAY with sand trace gravel (CL)  
**Depth :** 1.5      **Test Date:** 08-21-19      **Tested By:** R



Composite Sieve Data	
Standard Sieve Size	Percent Passing
3"	
1.5"	
3/4"	100.0
3/8"	97.0
#4	95.9
#10	92.5
#16	90.5
#30	87.7
#50	84.3
#100	79.9
#200	73.7

Particle Diameter (mm)	Percent Soil in Suspension
0.0299	59.5
0.0197	52.2
0.0118	45.0
0.0085	40.6
0.0061	37.7
0.0031	30.5
0.0013	21.8

Atterberg Limits Test – ASTM D4318

**Project Number:** 155-90

**Project Name:** Mitchell

**Canyon Boring/Sample No:**

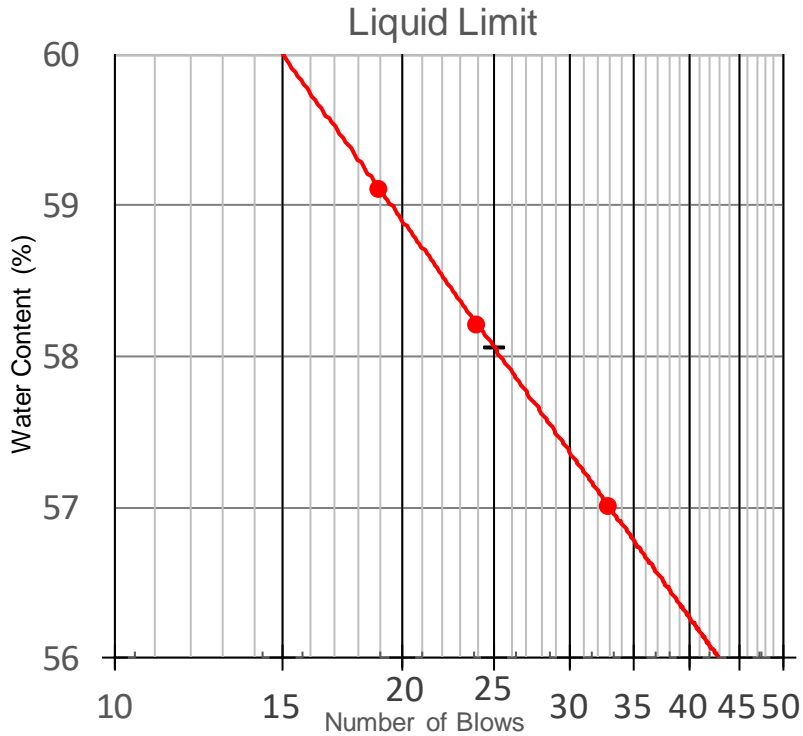
P-2

**Depth:** 1'-2'

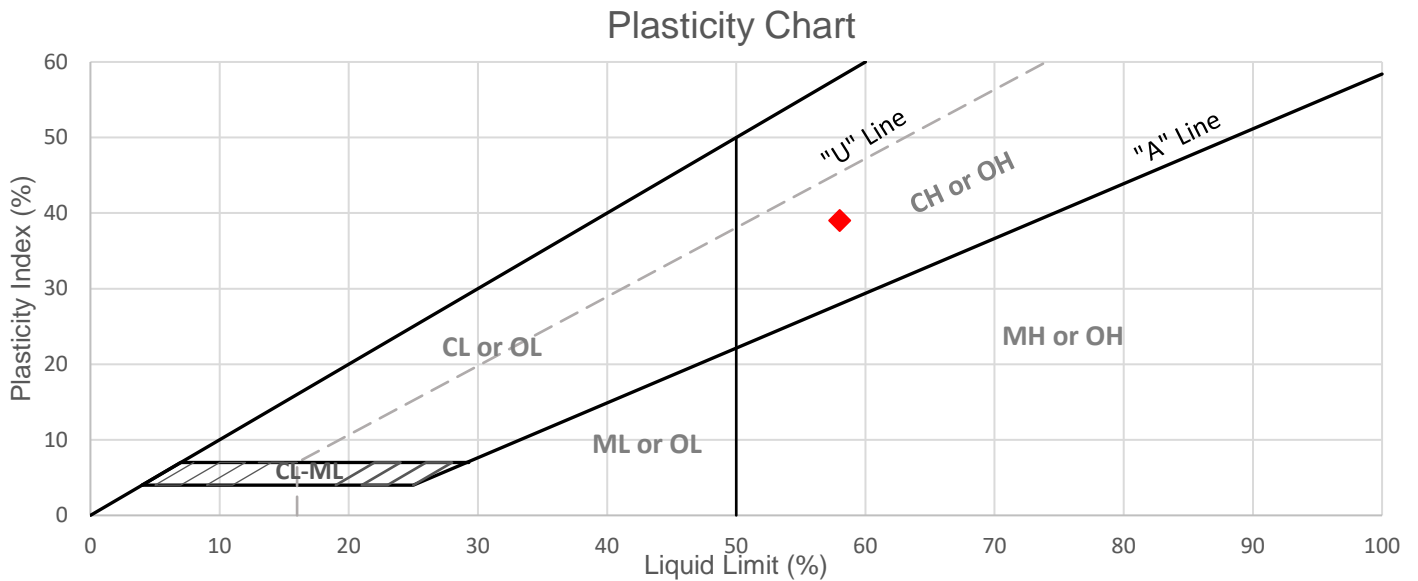
**Date:** 08-26-19

**Description of Sample:** Brown silty CLAY with sand (CH)

**Tested By** R



Plastic Limit Data			
Trial	1	2	Ave
Water Content (%)	18.8	19.1	19.0
Data Summary			
Liquid Limit	<b>58</b>		
Plastic Limit	<b>19</b>		
Plasticity Index	<b>39</b>		
Natural Water Content	<b>20.7</b>		
Liquidity Index	<b>0.044</b>		
% Passing #200 Sieve	<b>80.1</b>		



4 September, 2019

Job No.1908149  
Cust. No.11486

Ms. Hayley Palilla  
Stevens, Ferrone & Bailey  
1600 Willow Pass Court  
Concord, CA 94520

Subject: Project No.: SFB 143-4  
Project Name: Mitchell Canyon Road, Clayton, CA  
Corrosivity Analysis – ASTM Test Methods

Dear Ms. Palilla:

Pursuant to your request, CERCO Analytical has analyzed the soil samples submitted on August 20, 2019. Based on the analytical results, this brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurements, Samples No.001 & No.004 are classified as “corrosive” and Samples No.002 & No.003 are classified as “moderately corrosive”. All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentrations are none detected & 57 mg/kg and determined to be insufficient to attack steel embedded in a concrete mortar coating.

The sulfate ion concentrations are none detected & 430 mg/kg and are determined to be sufficient to potentially be detrimental to reinforced concrete structures and cement mortar-coated steel at these locations. Therefore, concrete that comes into contact with this soil should use sulfate resistant cement such as Type II, with a maximum water-to-cement ratio of 0.55.

The sulfide ion concentrations reflect none detected with a reporting limit of 50 mg/kg.

The pH of the soils ranged from 6.75 to 7.97 which does not present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures.

The redox potentials ranged from 250 to 300-mV. All samples are indicative of potentially “slightly corrosive” soils resulting from anaerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call *JDH Corrosion Consultants, Inc.* at (925) 927-6630.

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,

**CERCO ANALYTICAL, INC.**



J. Darby Howard, Jr., P.E.

President

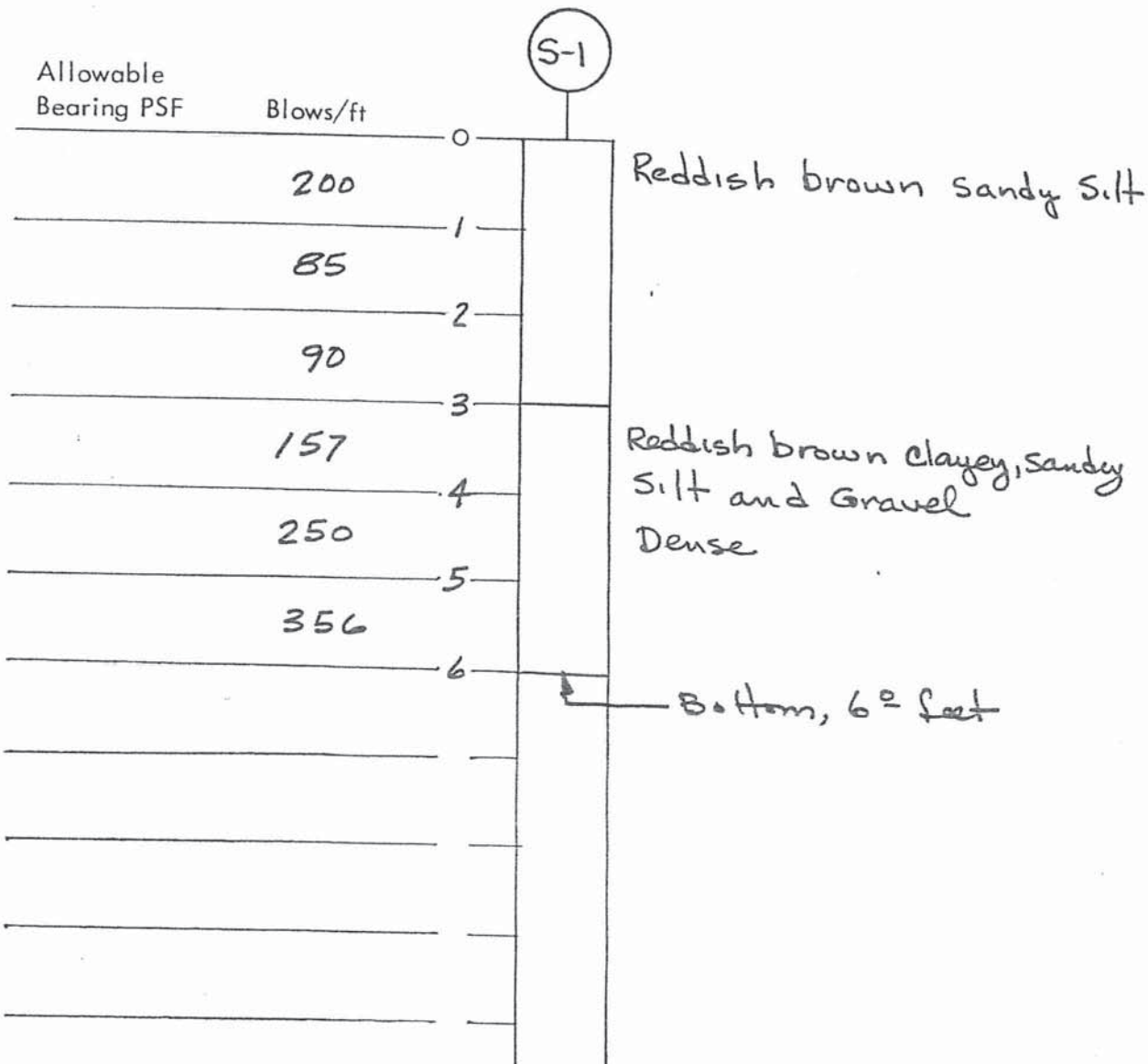
JDH/jdl  
Enclosure



**APPENDIX C**

Logs of Previous Borings by Others

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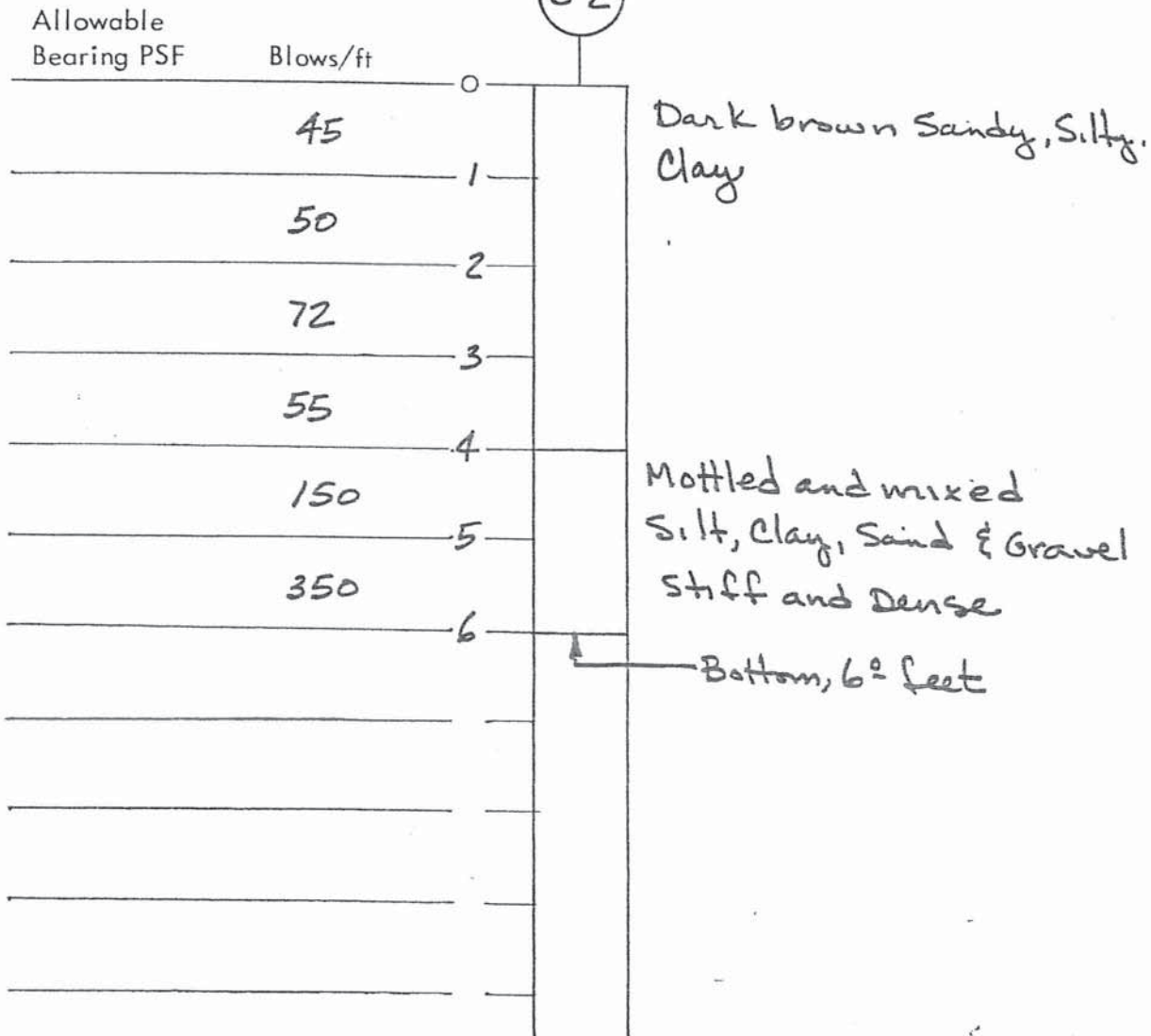


S borings taken with hand driven "porter-type" one inch sampler. Blow counts based upon 25 pounds falling 15 inches. Blow count is not the standard ASTM blow count ("N" value). For standard ASTM blow count, divide by five. (approximate only).

Location <u>Mitchell Canyon Rd.</u> <u>Clayton</u> Job# <u>166-2</u> Drawn by <u>ARS</u> Date <u>7-13-76</u> Checked by _____ Date _____ Scale <u>1"=2'</u>	LOG OF TEST BORINGS	ABEL R. SOARES and ASSOCIATES soil engineers and geologists 3625 Pinole Valley Road 415-758-5651 Pinole, California 94564
--	---------------------------	--



S-2



S borings taken with hand driven "porter-type" one inch sampler. Blow counts based upon 25 pounds falling 15 inches. Blow count is not the standard ASTM blow count ("N" value). For standard ASTM blow count, divide by five. (approximate only).

Location Mitchell Canyon Rd.  
Clayton  
Job# 166-2  
Drawn by ARS Date 7-13-76  
Checked by \_\_\_\_\_ Date \_\_\_\_\_  
Scale 1" = 2'

LOG  
OF  
TEST BORINGS

ABEL R. SOARES and ASSOCIATES  
soil engineers and geologists

3625 Pinole Valley Road 415-758-5651  
Pinole, California 94564

**APPENDIX D**  
ASFE Guidelines

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# Important Information about Your Geotechnical Engineering Report

*Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.*

*While you cannot eliminate all such risks, you can manage them. The following information is provided to help.*

## **Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects**

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.*

## **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

## **A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors**

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

## **Subsurface Conditions Can Change**

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

## **Most Geotechnical Findings Are Professional Opinions**

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## **A Report's Recommendations Are *Not* Final**

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

### **A Geotechnical Engineering Report Is Subject to Misinterpretation**

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

### **Do Not Redraw the Engineer's Logs**

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

### **Give Contractors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

### **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### **Geoenvironmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

### **Obtain Professional Assistance To Deal with Mold**

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

### **Rely on Your ASFE-Member Geotechnical Engineer for Additional Assistance**

Membership in ASFE/The Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

## **ASFE THE GEOPROFESSIONAL BUSINESS ASSOCIATION**

8811 Colesville Road/Suite G106, Silver Spring, MD 20910  
Telephone: 301/565-2733 Facsimile: 301/589-2017  
e-mail: info@asfe.org www.asfe.org

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October 5, 2020

Ms. Christine Gregory AICP, Planner  
Mr. Scott Allman, City Engineer  
Mr. Matthew Feske, Community Development Director  
CITY OF CLAYTON  
6000 Heritage Trail  
Clayton, CA 94517

**RE: Diablo Meadows - Proposed Subdivision #9536 / Mitchell Canyon Road**  
Readdress of Stice September 16, 2020 concerns  
Initial Study / Mitigated Negative Declaration ENV-01-20  
Rezone ZOA-02-20  
Development Plan Permit DP-01-20  
Vesting Tentative Map MAP-01-20  
Tree Removal Permit TRP-09-20

Dear Sirs:

My wife Patty and I met with Trent Sanson and Kerri Watt with DeNova Homes on Saturday September 26, 2020 to review our previously stated issues. We are pleased to report that our discussion was productive and it appears we have resolved the majority of our concerns. To clarify we are listing the following items when discussed were mitigated as follows:

**1. View Corridors & Design:**

- a. Although being impacted by having six residential lots completely lining our southern 450' long boundary our understanding is that no 2-story or homes with ADU's would be placed against this boundary.
- b. We discussed that a new 6'-0" high wood fence along the southern boundary adjacent to the existing cyclone fence.
- c. There are a number of trees along the southern boundary, some of which have grown through the existing cyclone fence. We asked that these trees be preserved and that a protection zone be implemented for protection. My understanding in reading the arborist's report was a suggestion for a 5'-0" protection zone.

**2. Zoning / Parking / Emergency Vehicle Access:**

- a. Following our discussion we support the current plan to provide 5,000 – 7,000 GSF lots despite the city's current plan requiring 15,000 GSF lots.
- b. We expressed concern that the proposed new street was relatively narrow and allowed for parking on only one-side, and only for a portion of its entire length. We were told that the street is termed a private street and meets city and county requirements.

- c. Concern was expressed that the proposed clear-roadway widths do not comply with Fire Apparatus Access Roads (FAAR) requirements. My understanding is that any FAAR that services a fire hydrant, must be a minimum of 26'-0" wide. (2019 Calif. Fire Code, Appendix D, Item D103.1). We were told that fire hydrants (3) are proposed but were accidentally omitted from being shown on the drawings.
- d. We also discussed how parking issues stemming from the resulting density and limited parking might be resolved in the future, (i.e. private events staged by new ownership). To safeguard our interests we intend to place boulders along the edge of the road to dissuade overflow parking in front of our residence impacting our access.
- e. We were told that the requirement for additional onsite parking for ADU's was omitted as a requirement.

**3. Storm Water Treatment & Watershed:**

- a. Concern was expressed for the design of the new 450' long swale along my property line, which doesn't detail how it will impact our existing trees and garden vegetation. Also the swale detail does not show how it will be designed to prevent flooding into our parcel.
- b. We discussed what measures could be implemented preventing home owners from filling in the swale where crossing their lots and defeating its purpose. We were told the issue would be addressed as part of a community entitlement agreement.

**4. Traffic Impact Analysis and TDM Plan:**

- a. Parcel E designated as "C3" appears to be a 5'-0" deep bio-retention pond immediately constructed next to MCR which could prove to be a safety hazard to quarry and vehicle traffic. If installed at this location should a physical barrier be placed between it and the street for safety purposes rather than just installing a curb? I'm concerned that an accident in the street could cause careening vehicles at speed to hit the barrier be propelled into our property causing property or bodily injury.

**5. Construction Noise Logistics & Construction Improvement Impacts:**

- a. We were given assurance that we would not be impacted by construction worker parking, off-loading of personnel and equipment, and temporary storage of materials, along our southern boundary or frontage on Mitchell Canyon Road.
- b. We were told limitations would be placed on locations of placement of generators, compressors, radios, etc. to lessen noise impact to neighbors.
- c. We were told that hours of construction would be limited to 7:00AM and 5:00PM weekdays. We are also asking that construction be prohibited during weekends and holidays.

- d. We are that measures for dust and mud cleanup on the roadway, and garbage abatement are being implemented for construction. The same holds for water run-off and containment (SWPP) as a result of the construction process.
- e. We were told that electrical facilities would be tapped from the OH 12kV line on the west side of MCR and electrical and communication facilities would be placed underground within the development.
- f. Our main interest is as the project moves forward we hope to work with the Applicant, City and local utility providers to schedule and limit disruptions water, gas and electric services to my property.

**6. Public Utilities / Sanitary Sewer:**

- a. We were told that large size sanitary sewer and water lines were required by and would be extended from the Mitchell Canyon Court/MCR intersection across the frontage of our property to the new development. Knowing that this will require a major excavation we're hoping that the sizing of these services will be large enough to accommodate any future development that could occur in our property and that a SS manhole be added as part this scope across the center of our lot.

**7. Traffic Impact Analysis & TDM Plan:**

Although not a requirement for this development I and some of my neighbors are concerned about the cumulative increase of vehicles and overt speeding on Mitchell Canyon Road that has occurred over the years. It seems that it is time for the city to implement some type of traffic calming/control measures other than parking unoccupied police cars in an attempt to control the posted 25 mph speed limit and limit vehicle noise.

The city has displayed a knee jerk reaction to when we first moved into the area. First dealing with the death of a school child who was killed by a quarry truck, to the latest incident involving a child on a scooter. The middle section of MCR in which we front seems to be the sector that truck and neighbors living at the upper end tend to speed. It's a unique 2-lane road that not only serves the existing neighborhoods, but a working quarry and a main entrance to Mt. Diablo State Park. During the week, we see a continuous progression of tractor-trailers (quarry), neighbor vehicle traffic and pedestrians walking the adjacent trail to the park. In busy times it's not uncommon to see trucks speed up to 45 - 50 MPH by the time they hit my frontage. During spring and summer weekends there is an abundance of motor traffic transporting horse trailers, trail bikes and bicycles as well as revelers coming from parties in the park. Traffic during weekends has seen similar over-speeding.

Also during the course of our residency we've seen when wildfires occur in and around MDSP, Mitchell Canyon Road is frequently shut-down and taken over by Cal-Fire for heavy equipment and fire fighter egress. You can now add construction deliveries and construction worker traffic to that as well.

We would expect that the city take action on how they are going to deal with these issues before future incidents occur.

- The California Environmental Quality Act (CEQA) requires comprehensive evaluation of traffic impacts associated with new developments, esp. as they relate to the new Vehicle Miles Traveled (VMT) criteria.
- Has the City or Applicant implemented this process?
- Has a consultant gathered car counts? These should be scheduled for times that capture both weekday and weekend traffic, special events, etc.
- With development comes expectation that added foot and bicycle traffic will occur along our frontage.

If there are Significant Impacts discovered during the TIA we expect the City to provide and pay for Mitigation Measures. I also understand that these Mitigations are typically reconciled through the Applicant's Transportation Management Plan (TDM). Please let me know if/how we may provide input to the development of the TDM as the project moves forward.

In closing we are in support of this project trusting the above issues can be managed to the satisfaction of the community.

If you have any questions or concerns we can be reached via telephone at (408-712-3255), (925) 812-2250 or at [johnstice@johnstice.com](mailto:johnstice@johnstice.com).

Sincerely,

*John Stice*  
895 Mitchell Canyon Road

Cc: Peter Cloven, Chair, Planning Commission  
Julie Pierce, Mayor



**TJKM**

VISION THAT MOVES YOUR COMMUNITY

## TECHNICAL MEMORANDUM

*Date:* October 8, 2020

*To:* Nick Pappini

*From:* Chris D. Kinzel, P.E.  
Vice President

*Subject:* **Diablo Meadows Traffic Analysis**

TJKM was asked to prepare a focused traffic analysis of the proposed 18 unit single family residential development located on the west side of Mitchell Canyon Road about 400 feet north of the intersection of Herriman Drive and Mitchell Canyon Road. The development will be served by a single street providing direct access to all 18 units. For the purposes of this report, the new street is called Diablo Meadows Street.

### **Existing Conditions**

Mitchell Canyon Road is a two lane road serving primarily single family residential units from Clayton Road to the south city limits of Clayton, a distance of about 4.25 miles. Mitchell Canyon Road also extends north of Clayton Road. Based on counts supplied by the City, the traffic count on Mitchell Canyon Road is 2,432 vehicles per day. The entrance to the Cemex Clayton Quarry is located about 1,800 feet south of the proposed development with a small residential development and vacant land in the intervening 1,800 feet. The Cemex site is actively used to supply building materials, primarily in large trucks. In an observation made on September 17, 2020 there were 80 trucks on Mitchell Canyon Road between 7 and 9 a.m. and 3 trucks between 4 to 6 p.m.

TJKM conducted peak hour traffic counts at the busiest nearby intersection, Mitchell Canyon Road and Pine Hollow Road to determine the peak hour levels of service. The intersection is located very close to the Mount Diablo Elementary School, which was closed due to COVID on September 17, 2020 when the counts were made. According to the Metropolitan Transportation Commission, traffic volumes are about 20 percent below pre-COVID periods. Prior to calculating the level of service at the intersection, TJKM applied a factor to increase measured volumes by 20 percent. However, it should be noted that due to the proximity of the school, observed traffic volumes in the morning peak hours are likely to be well below those that exist when the school is in full operation. The City was not able to supply any historic peak hour counts of this intersection. It is likely that the measured p.m. peak hour volumes around 5 p.m. are not heavily affected by the school closure and are more representative of typical conditions.

CALIFORNIA • FLORIDA • TEXAS

Corporate Office: 4305 Hacienda Drive, Suite 550, Pleasanton, CA 94588

Phone: 925.463.0611 Fax: 925.463.3690 [www.TJKM.com](http://www.TJKM.com)

DBE • SBE



**Project Trip Generation**

TJKM utilized the Institute of Transportation Engineers, *Trip Generation, 10<sup>th</sup> Edition*, to determine trip generation for the development. Using land use category, 210 -- Single Family, Detached, the following information was determined:

Daily rate = 9.44 trips/day x 18 units = 170 trips/day

A.M. rate = 0.74 trips/hour x 18 units = 14 trips/hour, 4 trips in, 10 trips out

P.M. rate = 0.99 trips/hour x 18 units = 18 trips/hour, 11 trips in, 7 trips out

These volumes were used to calculate the level of service at the new intersection of Mitchell Canyon Road and Diablo Meadows Street and to determine the changes in level of service at the existing intersection of Mitchell Canyon Road and Pine Hollow Road. The Expanded Existing conditions are existing measured traffic with a 20 percent increase to reflect the fact that traffic is reduced by that amount due to COVID conditions. As noted above, the Mitchell Canyon/Pine Hollow intersection will have higher traffic volumes in the a.m. periods when on-site school instruction resumes.

**Level of Service Results**

Location and Scenario	A.M.		P.M.	
	Delay, seconds	LOS	Delay, seconds	LOS
Mitchell Canyon and Pine Hollow				
Existing Conditions	7.9	A	8.9	A
Expanded Existing Conditions	8.1	A	9.6	A
Expanded Existing Conditions plus Project	8.2	A	9.7	A
Mitchell Canyon and Diablo Meadows				
Expanded Existing Conditions plus Project	1.0	A	0.2	A

The calculation sheets for the level of service are shown in the Appendix.

It can be seen that both intersections operate at very acceptable LOS A conditions during both a.m. and p.m. peak hours under all scenarios.

**Traffic Signal Warrant Analysis**

Neither intersection would benefit from the presence of traffic signals based on the findings of this study. Much higher traffic volumes are needed to justify traffic signals.

**Conclusion**

The Diablo Meadows project operates very acceptably and will have no discernable traffic impacts along Mitchell Canyon Road or any other location.

Please contact me if there are questions on this matter.

# VESTING TENTATIVE MAP

FOR

## SUBDIVISION 9538 DIABLO MEADOWS

CLAYTON • CONTRA COSTA COUNTY • CALIFORNIA

### PRELIMINARY DEVELOPMENT PLAN

SCALE: AS SHOWN APRIL, 2020

#### SUMMARY OF PRODUCT TYPE & SETBACKS

PLAN TYPE	NUMBER OF UNITS	MINIMUM SETBACKS		
		LIVING AREA	GARAGE	REAR
1	3	10'	20'	5'-5"
2	7	10'	20'	5'-10"
3	8	10'	20'	5'-10"
TOTAL	18			

#### PARKING SUMMARY

PARKING TYPE	NUMBER OF SPACES
WON STREET	15
DRIVEWAY	36
GARAGE	36
TOTAL	87

PARALLEL PARKING DIMENSION IS 8'-2 1/2"

#### PARCEL AREAS

PARCEL	AREA
A	0.28 AC. C3 BASIN
B	2.02 AC. EXIST. DRAINAGE AREA
C	1.91 AC. OPEN SPACE
D	0.43 AC. OPEN SPACE
E	0.11 AC. C3 BASIN
LOTS 1-18	3.19 AC. SINGLE FAMILY
STREET R/W	0.74 AC.
TOTAL	8.69 AC.

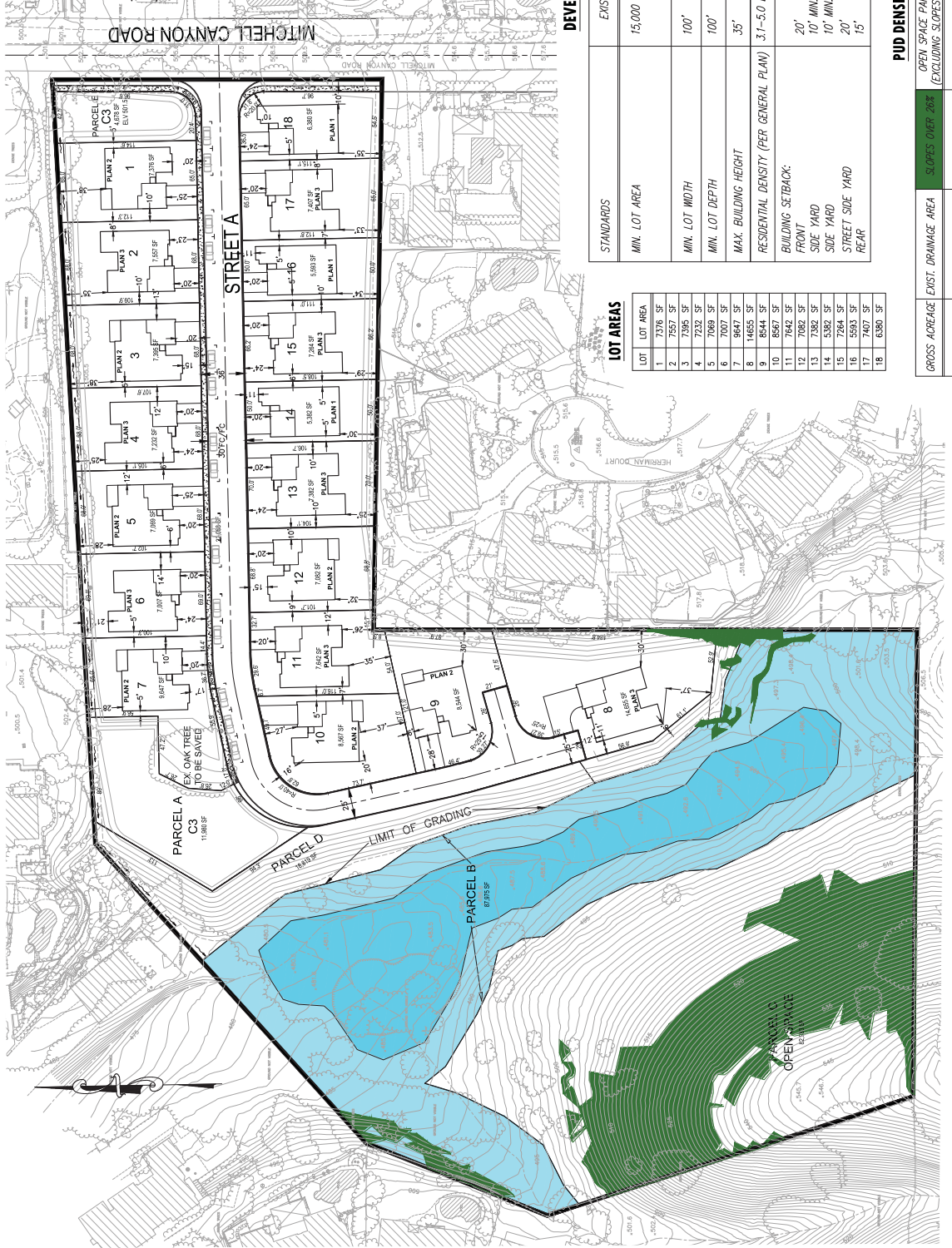
#### DEVELOPMENT STANDARDS

STANDARDS	EXIST. R-15	PROPOSED (REZONE)
MIN. LOT AREA	15,000 SQ. FT.	5,000 SQ. FT. (LOTS 14, 16 & 18) 7,000 SQ. FT. (LOTS 1-13, 15 & 17) 7,741 SQ. FT. (AVG)
MIN. LOT WIDTH	100'	50' (LOTS 14, 16 & 18 ONLY) TYPICAL LOT WIDTH APPROX. 65'
MIN. LOT DEPTH	100'	90' (TYPICAL LOT DEPTH APPROX. 100')
MAX. BUILDING HEIGHT		35'
RESIDENTIAL DENSITY (PER GENERAL PLAN)		3.1-5.0 DU/NET ACRE (NO) 3.90 DU/NET ACRE
BUILDING SETBACK:		
FRONT	20'	20' GAR / 10' LIVING AREA (VARIES BETWEEN 11'-24')
SIDE YARD	10' MIN. 25' AGGREGATE	5' MIN., 10' AGGREGATE (LOTS 14, 16 & 18)
STREET SIDE YARD	20'	5' MIN., 15' AGGREGATE (LOTS 1-13, 15 & 17)
REAR	15'	10'
		15' (TYPICAL REAR SETBACK/YARD IS GREATER THAN 20')

#### PUD DENSITY TABLE

GROSS ACREAGE	EXIST. DRAINAGE AREA	NET ACREAGE	NO. OF UNITS	DU/GROSS ACRE	DU/NET ACRE
8.69z AC	2.02z AC	4.67z AC	18	DU/AC	3.9 DU/AC
	0.87z AC	4.62z AC			

\* NET ACREAGE INCLUDES STREETS, OPEN SPACE, PARCEL D (AREAS LESS THAN 20% SLOPE), AND C-3 BASINS AREAS PER MDC CODE 17.22Z



#### PRELIMINARY DEVELOPMENT PLAN

SCALE: 1" = 40'

#### TENTATIVE MAP

SUBDIVISION 9538

DIABLO MEADOWS

CLAYTON

CONTRA COSTA COUNTY

CALIFORNIA

18-16-00

6 SHEETS

C-5

PRELIMINARY DEVELOPMENT PLAN

DEVELOPER: DeNova Homes

1500 WILLOW PASS COURT, CONCORD, CA 94520

PHONE: 925-685-0660

FAX: 925-685-0660

PREPARED BY: OR UNDER THE DIRECTION OF:

NO. BY DATE

REVISIONS

DATE: MARCH, 2020

SCALE: TJB/APS

DESIGNED: HK/TJB

ENGINEER: JR/YS

MANAGER: HK

REGISTERED PROFESSIONAL ENGINEER

NO. C-1000

EXPIRES: 12/31/2022

STATE OF CALIFORNIA

SEAL

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NO. C-1000

EXPIRES: 12/31/2022

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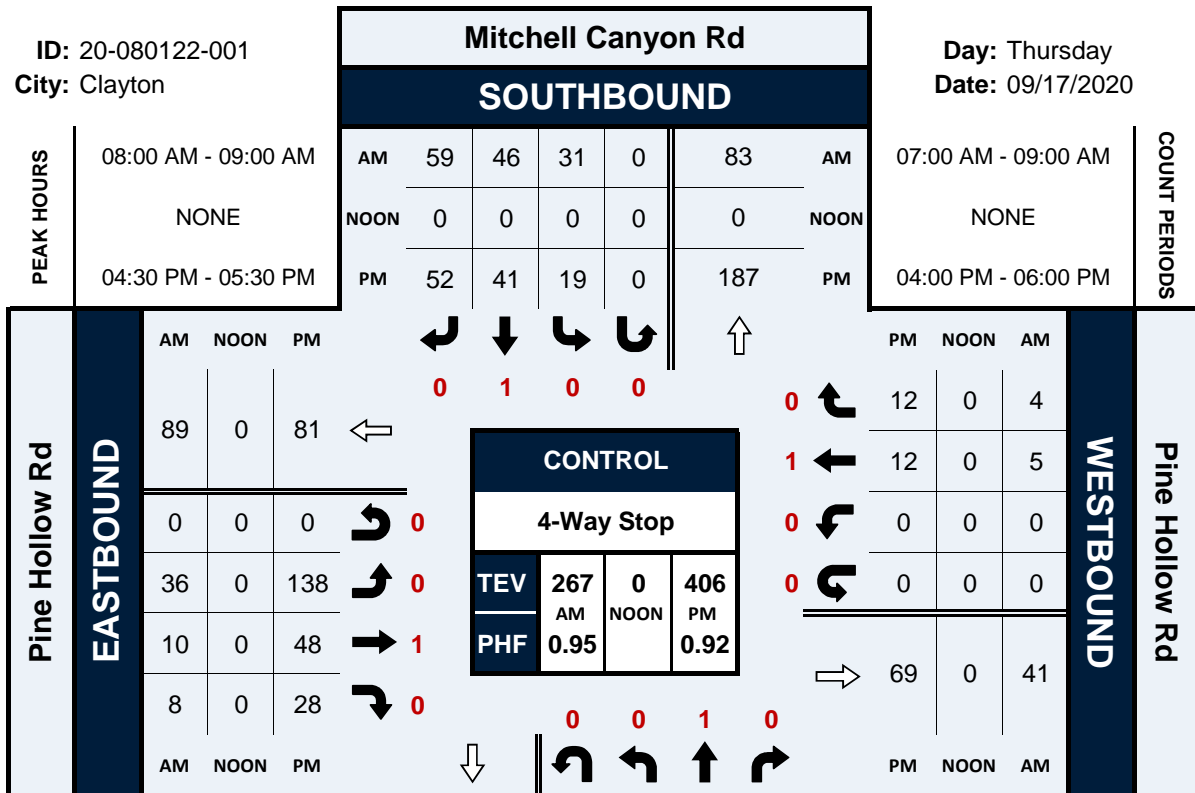
STATE OF CALIFORNIA

# Mitchell Canyon Rd & Pine Hollow Rd

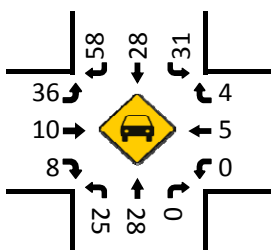
## Peak Hour Turning Movement Count

ID: 20-080122-001  
City: Clayton

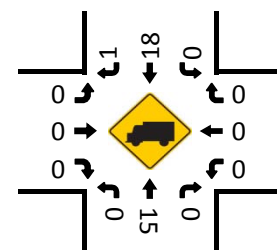
Day: Thursday  
Date: 09/17/2020



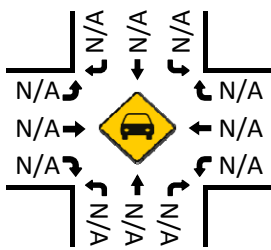
Cars (AM)



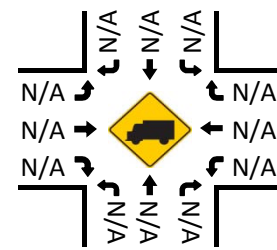
HT (AM)



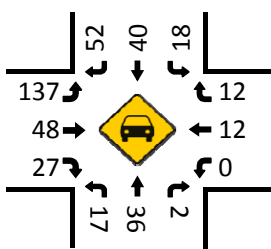
Cars (NOON)



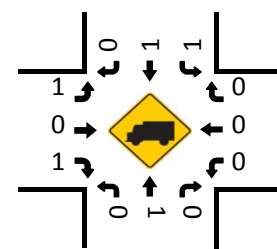
HT (NOON)



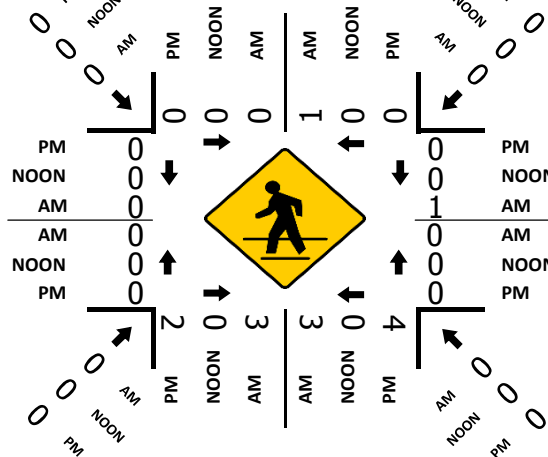
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



# HCM Unsignalized Intersection Capacity Analysis

## Mitchell Canyon Rd & Diablo Meadows

AM Peak Hour  
10/08/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	0	0	41	33	4
Future Volume (Veh/h)	10	0	0	41	33	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	0	0	45	36	4
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)	373					
<b>pX, platoon unblocked</b>						
vC, conflicting volume	83	38	40			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	83	38	40			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	919	1034	1570			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	11	45	40			
Volume Left	11	0	0			
Volume Right	0	0	4			
cSH	919	1570	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	9.0	0.0	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay	1.0					
Intersection Capacity Utilization	13.3%			ICU Level of Service	A	
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## Mitchell Canyon Rd & Diablo Meadows

PM Peak Hour  
10/08/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	0	0	34	42	11
Future Volume (Veh/h)	2	0	0	34	42	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	37	46	12
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)	274					
<b>pX, platoon unblocked</b>						
vC, conflicting volume	89	52	58			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	89	52	58			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	912	1016	1546			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	2	37	58			
Volume Left	2	0	0			
Volume Right	0	0	12			
cSH	912	1546	1700			
Volume to Capacity	0.00	0.00	0.03			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	9.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	9.0	0.0	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay	0.2					
Intersection Capacity Utilization	13.3%			ICU Level of Service	A	
Analysis Period (min)	15					

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	43	12	10	0	6	5	30	62	0	37	59	71
Future Vol, veh/h	43	12	10	0	6	5	30	62	0	37	59	71
Peak Hour Factor	0.75	0.75	0.75	0.56	0.56	0.56	0.94	0.94	0.94	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	16	13	0	11	9	32	66	0	45	71	86
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	7.5	8.1	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	66%	0%	22%
Vol Thru, %	67%	18%	55%	35%
Vol Right, %	0%	15%	45%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	65	11	167
LT Vol	30	43	0	37
Through Vol	62	12	6	59
RT Vol	0	10	5	71
Lane Flow Rate	98	87	20	201
Geometry Grp	1	1	1	1
Degree of Util (X)	0.121	0.112	0.024	0.228
Departure Headway (Hd)	4.454	4.648	4.418	4.083
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	807	773	811	881
Service Time	2.468	2.664	2.438	2.096
HCM Lane V/C Ratio	0.121	0.113	0.025	0.228
HCM Control Delay	8.1	8.3	7.5	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.1	0.9

HCM 6th AWSC  
1: Mitchell Canyon Rd & Pine Hollow Rd

AM Peak Hour  
10/09/2020

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	43	12	10	0	6	5	30	52	0	37	55	71
Future Vol, veh/h	43	12	10	0	6	5	30	52	0	37	55	71
Peak Hour Factor	0.75	0.75	0.75	0.56	0.56	0.56	0.94	0.94	0.94	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	16	13	0	11	9	32	55	0	45	66	86
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	7.5	8	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	66%	0%	23%
Vol Thru, %	63%	18%	55%	34%
Vol Right, %	0%	15%	45%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	65	11	163
LT Vol	30	43	0	37
Through Vol	52	12	6	55
RT Vol	0	10	5	71
Lane Flow Rate	87	87	20	196
Geometry Grp	1	1	1	1
Degree of Util (X)	0.108	0.111	0.024	0.222
Departure Headway (Hd)	4.456	4.613	4.383	4.077
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	807	779	818	886
Service Time	2.469	2.629	2.401	2.077
HCM Lane V/C Ratio	0.108	0.112	0.024	0.221
HCM Control Delay	8	8.2	7.5	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.1	0.8



Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	36	10	8	0	5	4	25	43	0	31	46	59
Future Vol, veh/h	36	10	8	0	5	4	25	43	0	31	46	59
Peak Hour Factor	0.75	0.75	0.75	0.56	0.56	0.56	0.94	0.94	0.94	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	13	11	0	9	7	27	46	0	37	55	71
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.3	7.8	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	67%	0%	23%
Vol Thru, %	63%	19%	56%	34%
Vol Right, %	0%	15%	44%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	54	9	136
LT Vol	25	36	0	31
Through Vol	43	10	5	46
RT Vol	0	8	4	59
Lane Flow Rate	72	72	16	164
Geometry Grp	1	1	1	1
Degree of Util (X)	0.086	0.09	0.019	0.179
Departure Headway (Hd)	4.287	4.505	4.26	3.927
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	823	800	845	901
Service Time	2.378	2.506	2.261	2.007
HCM Lane V/C Ratio	0.087	0.09	0.019	0.182
HCM Control Delay	7.8	8	7.3	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.3	0.1	0.6

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	166	58	34	0	14	14	20	51	2	23	60	62
Future Vol, veh/h	166	58	34	0	14	14	20	51	2	23	60	62
Peak Hour Factor	0.84	0.84	0.84	0.66	0.66	0.66	0.76	0.76	0.76	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	198	69	40	0	21	21	26	67	3	25	65	67
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	7.9	8.8	8.9
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	27%	64%	0%	16%
Vol Thru, %	70%	22%	50%	41%
Vol Right, %	3%	13%	50%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	258	28	145
LT Vol	20	166	0	23
Through Vol	51	58	14	60
RT Vol	2	34	14	62
Lane Flow Rate	96	307	42	158
Geometry Grp	1	1	1	1
Degree of Util (X)	0.132	0.393	0.054	0.203
Departure Headway (Hd)	4.963	4.603	4.575	4.629
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	719	780	778	772
Service Time	3.013	2.642	2.63	2.673
HCM Lane V/C Ratio	0.134	0.394	0.054	0.205
HCM Control Delay	8.8	10.6	7.9	8.9
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.5	1.9	0.2	0.8

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	166	58	34	0	14	14	20	44	2	23	49	62
Future Vol, veh/h	166	58	34	0	14	14	20	44	2	23	49	62
Peak Hour Factor	0.84	0.84	0.84	0.66	0.66	0.66	0.76	0.76	0.76	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	198	69	40	0	21	21	26	58	3	25	53	67
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.5	7.8	8.7	8.7
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %		30%	64%	0%
Vol Thru, %		67%	22%	50%
Vol Right, %		3%	13%	50%
Sign Control		Stop	Stop	Stop
Traffic Vol by Lane		66	258	28
LT Vol		20	166	0
Through Vol		44	58	14
RT Vol		2	34	14
Lane Flow Rate		87	307	42
Geometry Grp		1	1	1
Degree of Util (X)		0.119	0.388	0.053
Departure Headway (Hd)		4.942	4.55	4.514
Convergence, Y/N		Yes	Yes	Yes
Cap		723	789	790
Service Time		2.987	2.585	2.563
HCM Lane V/C Ratio		0.12	0.389	0.053
HCM Control Delay		8.7	10.5	7.8
HCM Lane LOS		A	B	A
HCM 95th-tile Q		0.4	1.8	0.2

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	138	48	28	0	12	12	17	37	2	19	41	52
Future Vol, veh/h	138	48	28	0	12	12	17	37	2	19	41	52
Peak Hour Factor	0.84	0.84	0.84	0.66	0.66	0.66	0.76	0.76	0.76	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	164	57	33	0	18	18	22	49	3	21	45	57
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.5	7.6	8.3	8.2
HCM LOS	A	A	A	A

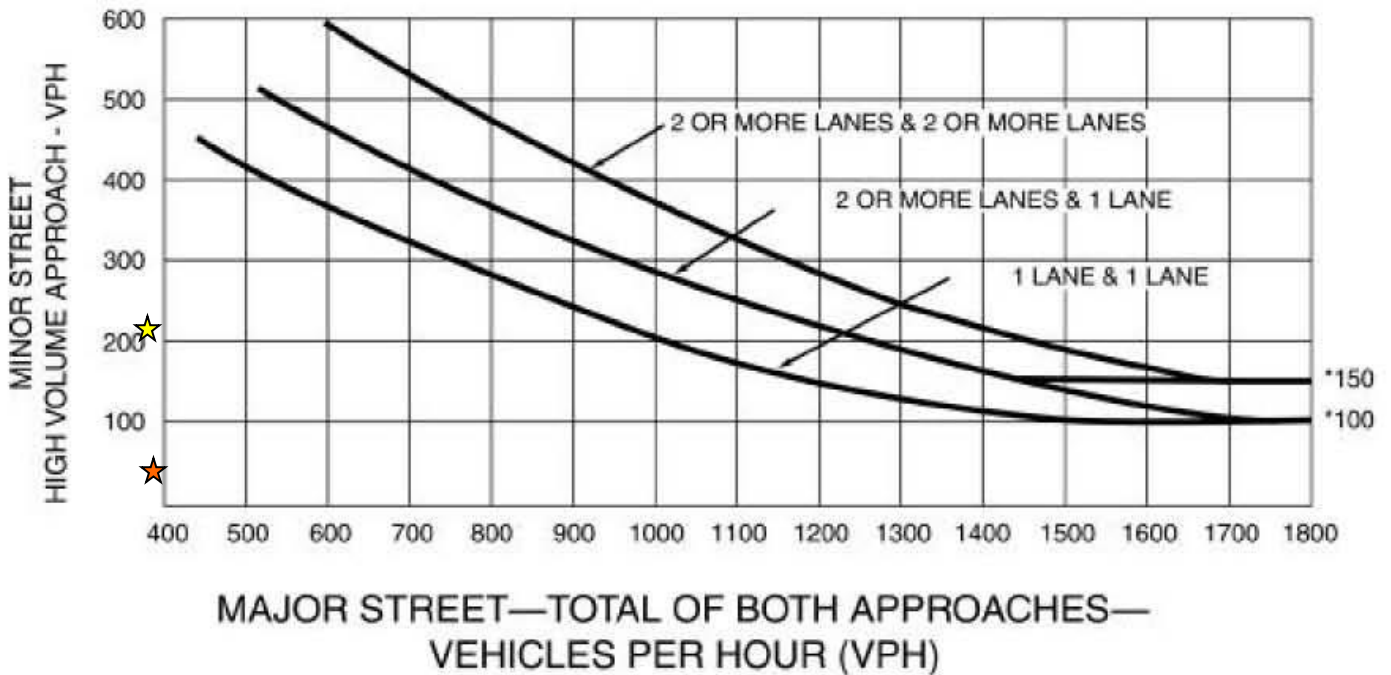
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	64%	0%	17%
Vol Thru, %	66%	22%	50%	37%
Vol Right, %	4%	13%	50%	46%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	214	24	112
LT Vol	17	138	0	19
Through Vol	37	48	12	41
RT Vol	2	28	12	52
Lane Flow Rate	74	255	36	122
Geometry Grp	1	1	1	1
Degree of Util (X)	0.097	0.314	0.044	0.149
Departure Headway (Hd)	4.753	4.444	4.34	4.418
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	754	810	824	812
Service Time	2.781	2.465	2.369	2.443
HCM Lane V/C Ratio	0.098	0.315	0.044	0.15
HCM Control Delay	8.3	9.5	7.6	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1.3	0.1	0.5

## Peak Hour Warrant (Urban Areas)

Intersection #1: Mitchell Canyon Rd and Pine Hollow Rd, City of Clayton, CA  
Scenario: Existing Conditions

**Figure 4C-3. Warrant 3, Peak Hour**

*Minor Street Volume = 54 (214) VPH*



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

*Major Street Volume = 204 (168) VPH*

★ *AM Peak Hour*

★ *PM Peak Hour*

***A signal is NOT warranted in either Peak Hour***

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

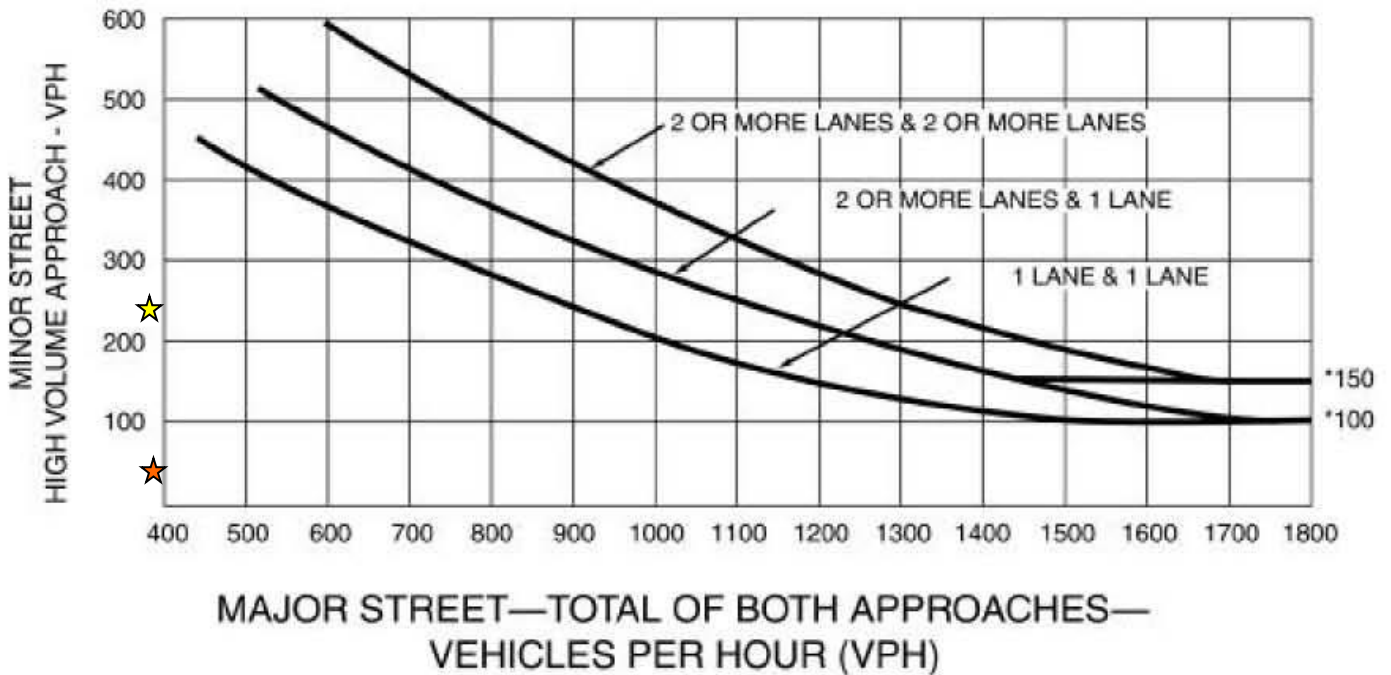


## Peak Hour Warrant (Urban Areas)

Intersection #1: Mitchell Canyon Rd and Pine Hollow Rd, City of Clayton, CA  
Scenario: Expanded Existing Conditions

**Figure 4C-3. Warrant 3, Peak Hour**

*Minor Street Volume = 65 (258) VPH*



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

*Major Street Volume = 245 (200) VPH*

★ *AM Peak Hour*

★ *PM Peak Hour*

***A signal is NOT warranted in either Peak Hour***

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

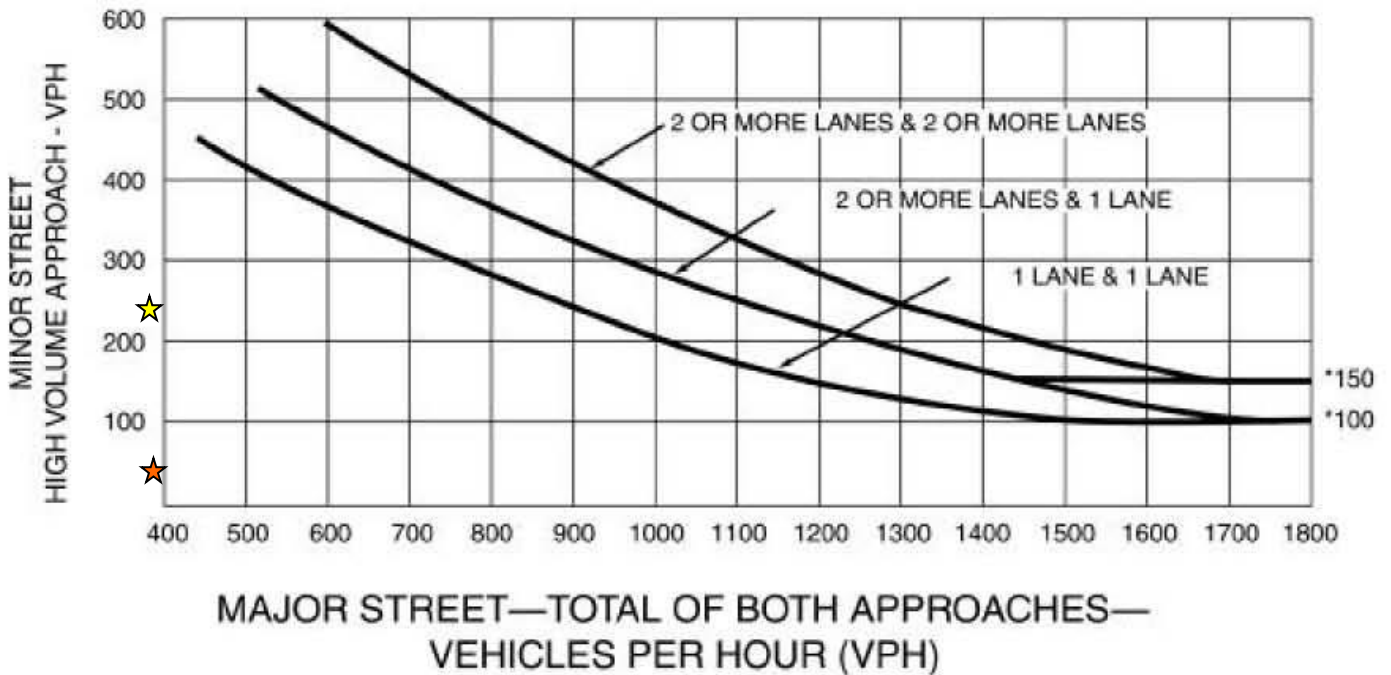


## Peak Hour Warrant (Urban Areas)

Intersection #1: Mitchell Canyon Rd and Pine Hollow Rd, City of Clayton, CA  
Scenario: Expanded Existing plus Project Conditions

**Figure 4C-3. Warrant 3, Peak Hour**

*Minor Street Volume = 65 (258) VPH*



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

*Major Street Volume = 259 (218) VPH*

★ *AM Peak Hour*

★ *PM Peak Hour*

***A signal is NOT warranted in either Peak Hour***

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

