City of Woodland
Community Development Department

East Beamer Way Neighborhood Campus Project

Initial Study/Mitigated Negative Declaration

July 2020

Prepared by

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INITIAL STUDY
JULY 2020

A. BACKGROUND

1. Project Title: East Beamer Way Neighborhood Campus Project

2. Lead Agency Name and Address: City of Woodland
Community Development Department
300 First Street
Woodland, CA 95695

3. Contact Person and Phone Number: Stephen Coyle
Deputy Director of Community Development
(530) 661-5910

4. Responsible Entity Name and Address: Yolo County
625 Court Street
Woodland, CA 95695

5. Project Location: Northwest of the East Beamer/County Road 102 Intersection
Woodland, CA 95695
Assessor's Parcel Number (APN): 027-360-010

6. Project Sponsor: City of Woodland
Community Development Department
300 First Street
Woodland, CA 95695

7. Existing City of Woodland General Plan: Industrial (IN)

8. Existing City of Woodland Zoning: N/A

9. Existing Yolo County General Plan: Public and Quasi-Public (PQ)

10. Existing Yolo County Zoning: Public/Quasi Public (PQP)

11. Proposed Yolo County General Plan: Commercial General (CG)

12. Proposed Yolo County Zoning: General Commercial (C-G)

13. Surrounding Land Uses and Setting:

The East Beamer Way Neighborhood Campus Project (proposed project) is located on a 128-acre parcel, directly northwest of the intersection of East Beamer Street and County Road (CR) 102. The project site is directly outside of the City of Woodland limits, in an unincorporated portion of Yolo County. The parcel is primarily undeveloped with an existing drainage basin located on a portion of the project site. Surrounding land uses include vacant agricultural and industrial land to the north, south, and east. The Woodland

Biomass Power plant is on the western border of the site, and a Target distribution center is to the southeast.

14. Project Description Summary:

The proposed project would include subdivision of the existing 128-acre parcel into four separate parcels. Three parcels would be used to accommodate the proposed project while the remaining parcel (approximately 119.5 acres) would remain as is. The proposed project would include development of approximately 8.5 acres of land for uses focused on providing services to homeless persons in the area. The project would include development of a neighborhood of permanent supportive residences, a shelter, a substance abuse treatment facility, and a community center, possibly including a health clinic. All structures would be built on concrete foundations, upon concrete piers on compacted fill to raise the project's elevation above the base flood elevation. As part of the proposed project, the three parcels that would contain the foregoing homeless service facilities would be sold, while the remaining 119.5-acre parcel would remain undisturbed under City ownership. Implementation of the proposed project would require approval of a Tentative Parcel Map, General Plan Amendment, and Rezone by the County of Yolo, and approval of an Out of Agency Services Agreement, Sale of Property; and General Plan Amendment by the City of Woodland.

15. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1.:

In compliance with Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1), project notification letters were distributed to the Cortina Rancheria – Kletsel Dehe Band of Wintun Indians and Yocha Dehe Wintun Nation. The letters were distributed on March 6, 2020 and requests to consult have not been received to date.

B. SOURCES

All technical reports prepared for the project analysis are available upon request at the City of Woodland City Hall, located at 300 First Street, Woodland, CA 95695. The following documents are referenced information sources utilized by this analysis:

1. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update.* January 20, 2017.
2. California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed November 2019.
3. California Department of Conservation. *Geologic Hazards Data & Maps*. Available at: https://maps.conservation.ca.gov/geologichazards/. Accessed November 1, 2019.
4. California Department of Forestry and Fire Protection. *Yolo County, Draft Fire Hazard Severity Zones in LRA*. October 5, 2017.
5. California Department of Resources Recycling and Recovery (CalRecycle). *SWIS Facility Detail, Yolo County Central Landfill (57-AA-0001)*. Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/. Accessed November 20, 2019.

6. California Department of Toxic Substances Control. *EnviroStor*. Available at: http://www.envirostor.dtsc.ca.gov. Accessed August 2019.
7. California Department of Transportation. *List of Eligible and Officially Designated State Scenic Highways*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed December 2019.
8. California Environmental Protection Agency California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
9. California Water Boards. *Media Release: Statewide Water Savings Exceed 25 Percent in February*. April 4, 2017.
10. City of Woodland. *2015 Urban Water Management Plan* [pg 6-8]. June 2016.
11. City of Woodland. *General Plan Update 2035*. May 16, 2017.
12. County of Yolo. *County of Yolo 2030 General Plan*. November 10, 2009.
13. County of Yolo. *Yolo County Community Services Department Zoning Code (Title 8 of the Yolo County Code)*. July 2014.
14. County of Yolo. *Yolo County Unincorporated Area Community Profile Version 1.0*. December 2018.
15. Division of Oil, Gas, and Geothermal Resources. *Well Finder DOGGR GIS*. Available at: https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-121.69618/38.67745/12. Accessed November 22, 2019.
16. Estep Environmental Consulting*. Biological Resources Assessment of the City of Woodland's East Beamer Street at County 102 Parcel*. December 26, 2018.
17. Federal Emergency Management Agency. *Flood Insurance Rate Map 06013C0355G.* Effective March 21, 2007.
18. Tom Origer & Associates. *Cultural Resources Study for the East Beamer Way Project, Woodland, Yolo County, California.* October 22, 2019.
19. United States Department of Agriculture Natural Resources Conservation Service. *Web Soil Survey*. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed November 20, 2019.
20. United States Environmental Protection Agency. *Legal Compilation on Noise* [Volume 1, pg 2-104]. 1973.
21. Valley Clean Energy. *Standard Green*. Available at: https://valleycleanenergy.org/energy-choices/standard-service/. Accessed November 21, 2019.
22. Wallace Kuhl & Associates. *Geotechnical Engineering Report: East Beamer Street Housing Project*. January 29, 2020.
23. Wallace Kuhl & Associates. *Phase I Environmental Site Assessment – East Beamer Housing Project Property Woodland, California WKA No. 12185.04P*. May 29, 2020.
24. Wallace Kuhl & Associates. *Stockpile Soil sampling and Analysis Report – East Beamer Housing Project Woodland, CA WKA No. 12185.03P*. May 29, 2020.
25. Water Resources Association of Yolo County. *Yolo County Subsidence Network: 2016 Monitoring Event*. 2016.

26. Woodland-Davis Clean Water Agency. *Our Water: Water for Woodland, Davis and UC Davis*. Available at: https://www.wdcwa.com/our-water-1. Accessed November 22, 2019.
27. Yolo County. *Climate Action Plan*. Available at: https://www.yolocounty.org/community-services/planning-public-works/planning-division/climate-action-plan. Accessed January 9, 2020.
28. Yolo County. *County of Yolo 2030 Countywide General Plan*. November 10, 2009.
29. Yolo County. *Storm Water Management*. Available at http://www.yolocounty.org/community-services/planning-public-works/public-works-division/storm-water-management. Accessed June 2017.
30. Yolo County. *Yolo County Climate Action Plan: A Strategy for Smart Growth Implementation, Greenhouse Gas Reduction, and Adaptation to Global Climate Change*. March 15, 2011.
31. Yolo County. *Yolo County Code of Ordinances: Title 10, Chapter 13, Section 10-13.6. Service Fees.* Available at: http://library.amlegal.com/nxt/gateway.dll/California/yolocounty_ca/yolocountycacodeofordinances?f=templates$fn=default.htm$3.0$vid=amlegal:yolocounty_ca. Accessed November 25, 2019.
32. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is less-than-significant with mitigation as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture and Forest 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**	✖ **Tribal Cultural Resources**
☐ **Wildfire**	☐ **Utilities and Service Systems**	

D. DETERMINATION

On the basis of this Initial Study:

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

✖ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" 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
Stephen Coyle	City of Woodland
Printed Name	For

E. BACKGROUND AND INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) provides an environmental analysis pursuant to the California Environmental Quality Act (CEQA) for the proposed project. This document has been prepared by the City of Woodland as lead agency under CEQA. The IS/MND contains an analysis of the environmental effects of construction and operation of the proposed project.

The mitigation measures prescribed for environmental effects described in this IS/MND would be implemented in conjunction with the project, as required by CEQA, and the mitigation measures would be incorporated into the project. In addition, a project Mitigation Monitoring and Reporting Program (MMRP) would be adopted in conjunction with approval of the project.

In accordance with Section 15073 of the CEQA Guidelines, this document is being circulated to local, state, and federal agencies and to interested organizations and individuals who may wish to review and comment on the report. After the public review period, the City will evaluate comments received on the draft IS/MND, and will prepare responses to address any substantial evidence that the proposed project could have a significant impact on the environment.

F. PROJECT DESCRIPTION

The following section includes a description of the project's location and surrounding land uses, as well as a discussion of the project components and discretionary actions requested of the City of Woodland and Yolo County.

Project Location and Surrounding Land Uses

The proposed project is located on a 128-acre parcel (Assessor's Parcel Number 027-360-010), directly northwest of the intersection of East Beamer Street and CR 102 (see Figure 1). The project site is adjacent to City of Woodland limits, and is in an unincorporated portion of Yolo County. The parcel was previously used as a wastewater treatment facility, but was decommissioned in the 1980s. Since decommissioning, the parcel has remained vacant, and some of the water treatment ponds still exist. Currently, the parcel is undeveloped, and the remaining ponds function as stormwater retention basins. Surrounding land uses include vacant agricultural and industrial land to the north, south, and east. The Woodland Biomass Power plant is on the western border of the parcel, and a Target distribution center is to the southeast of the site (see Figure 2). According to the County of Yolo General Plan, the parcel is designated PQ and zoned PQP. The City of Woodland 2035 General Plan designates the site IN, but because the parcel is outside of City limits, the parcel currently does not have a City zoning designation.

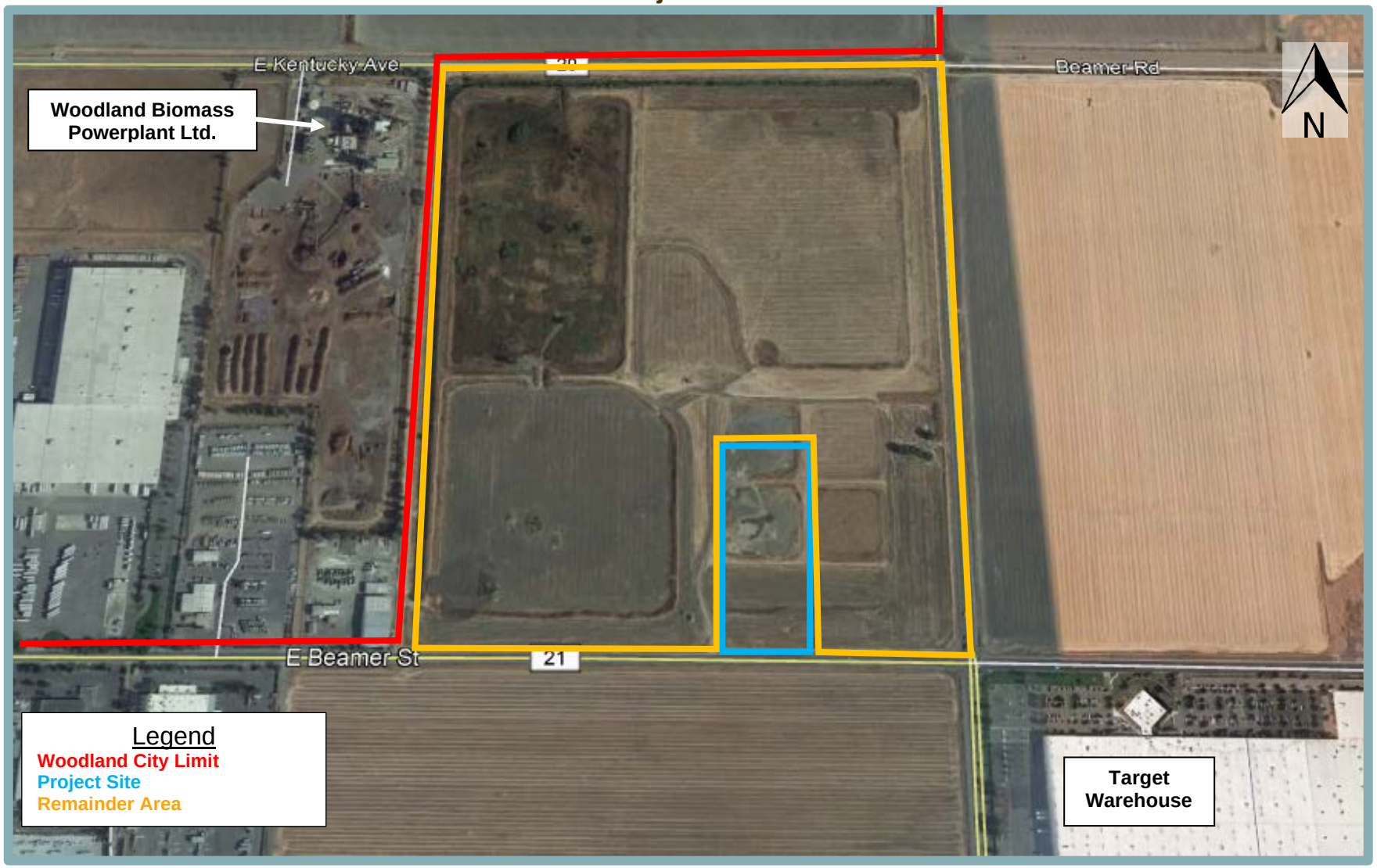
Project Components

The proposed project would include subdivision of the existing 128-acre parcel into four separate parcels. Three parcels would be used to accommodate the proposed project while the remaining parcel (approximately 119.5 acres) would remain as is, under City ownership. The portion of the subdivided parcel subject to the proposed development discussed below is hereinafter referred to as the project site, while the remaining area of the parcel is referred to as the remainder area.

Figure 1
Project Vicinity



Figure 2
Project Site



Because the parcel is located outside of City limits, the County of Yolo would need to approve the proposed Tentative Parcel Map. Yolo County would also be responsible for approving a General Plan Amendment to redesignate the site from Public and Quasi-Public (PQ) to Commercial General (CG), as well as a Rezone from Public/Quasi-Public (PQP) to General Commercial (C-G). The site's current PQ land use designation and PQP zoning are intended for land uses including public offices, civic uses, schools, museums, fraternal organizations, and more. Alternatively, the CG land use and C-G zoning is intended to include general retail, personal services, professional offices, restaurants, gas and service stations, hotels and motels, and other similar uses.[1] As such, the proposed CG land use designation and C-G zoning would better accommodate the proposed land uses.

The City of Woodland, as the lead agency, would be required to approve the Sale of Property as well as an Out of Agency Services Agreement to provide municipal services to the site. In addition, Woodland would need to approve a General Plan Amendment to allow homeless shelters and associated structures within land designated Industrial (IN).

The State of California, the County of Yolo, and the City of Woodland have adopted the Housing First model as the best practice for providing housing, achieving safety and stability, and improving health outcomes for the unhoused. In accordance with the Housing First model, the proposed project would include Rapid Re-Housing for those who have employment skills and Permanent Supportive Housing (PSH) for those who are chronically homeless with mental illness and substance use disorders.

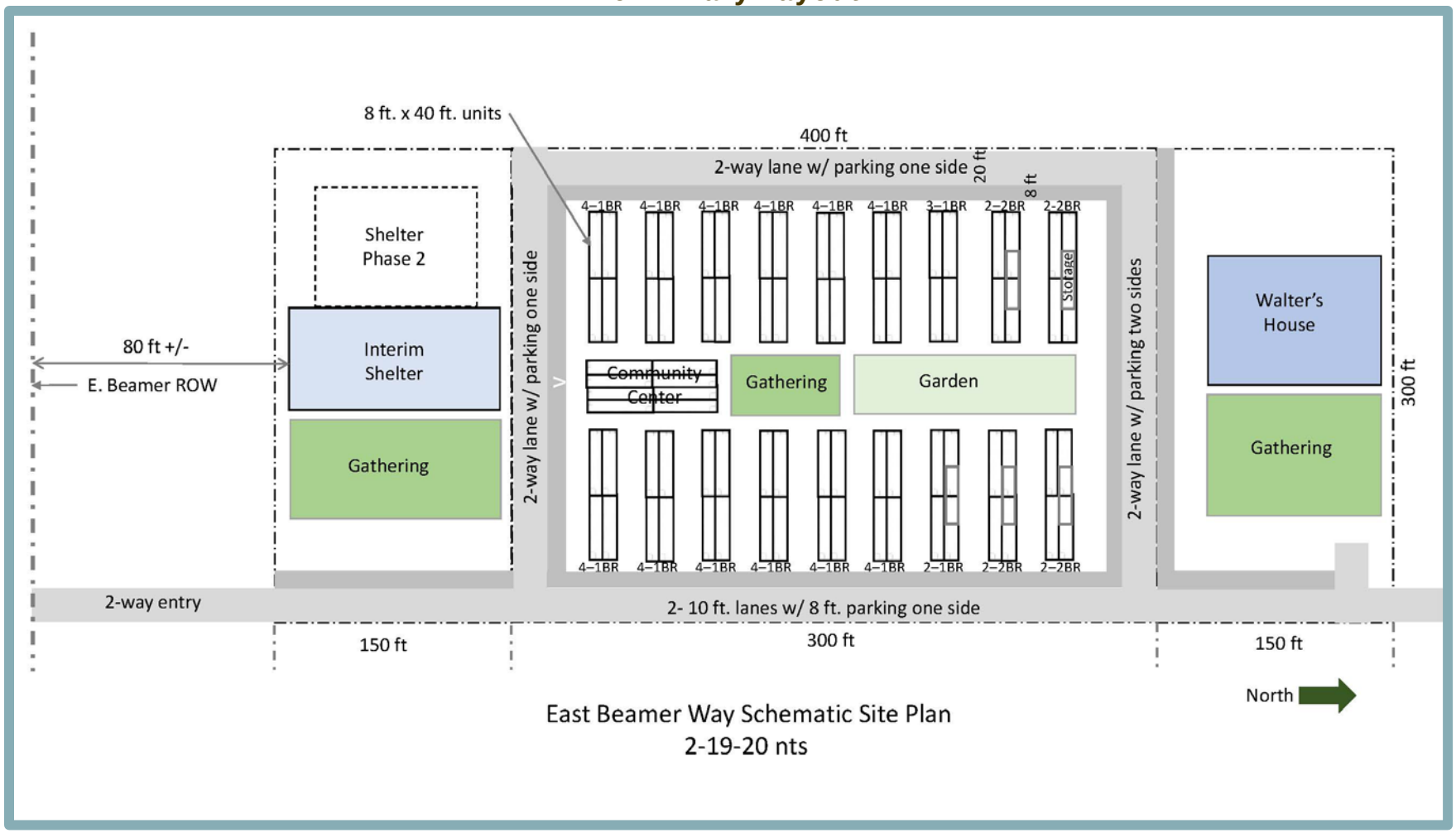
In accordance with the Housing First model, the project would include construction of a neighborhood of 51 one-bedroom units and 10 two-bedroom units, for a total of 71 beds intended for use by homeless persons in Woodland. The one-bedroom units would be 320 square feet (sf), and the two-bedrooms units would be 480 sf. All units would include a living room, bathroom, and kitchen with a dual stovetop and double sinks. Some of the one-bedroom units would be wheelchair accessible. Given the flexibility regarding the neighborhood design, for the purpose of this environmental analysis, the City has conservatively assumed 100 units would be operated on the site.

An on-site community center, possibly including a health clinic, and community garden would be built as part of the neighborhood. In addition, the proposed project would include construction and operation of a shelter for the homeless (100 beds) and a residential substance abuse treatment facility (54 beds). Friends of the Mission, a local non-profit that focuses on providing housing to individuals in need, would own the land and develop the neighborhood, shelter, and substance abuse treatment facility.

The layout of the proposed project would be such that the substance abuse treatment facility would occupy the northernmost portion of the site, the residential units would occupy the middle portion of the site, and the shelter would occupy the southernmost portion of the site (see Figure 3). The housing units would be clustered around a central aisle, which would include the community center, public garden, and a gathering area.

[1] County of Yolo. *Yolo County Community Services Department Zoning Code (Title 8 of the Yolo County Code)*. July 2014.

Figure 3
Preliminary Layout



As part of the proposed project, the area immediately east of the project site, within the remainder area, would be cut and the soil used as fill to raise the project site elevation above 43 feet. The fill would be concentrated on the northern portion of the project site, where the natural elevation is lowest. All housing structures would be built upon 12-inch concrete piers and concrete foundations to reach an elevation of 45 feet. The cut and fill activities would not result in a substantial change to water surface elevation in the project vicinity.

The proposed project would entail site improvements, including graded building pads with water, sewer, power utilities, and storm drainage infrastructure. Additionally, the City proposes to develop a new sidewalk and bus turnout on East Beamer Street, as well as installing four streetlights and ten street trees.

Infrastructure

The following section provides a discussion of water supply, sewer service, stormwater drainage, and energy service to the project site.

Water

Because the project site is outside of City limits, the City of Woodland and Yolo County would be required to enter an Out of Agency Services Agreement to allow the City to provide water services to the project. Water supply would be provided by the City of Woodland Utilities Division through connections to an existing water main within East Beamer Street. Each unit would be provided water access through connections to proposed four-inch water lines within the site. Water for fire safety would be available through an eight-inch water line that would encircle the perimeter of the project site. The proposed project would involve construction of five fire hydrants distributed throughout the property. Both the in-home water and fire water lines would connect to existing 12-inch water main within East Beamer Street.

Sewer

Following an Out of Agency Services Agreement between the City of Woodland and Yolo County, sewer treatment service for the neighborhood would be provided by the City of Woodland Utilities Division. Each unit would be connected to six-inch sewer lines, which would direct flows to a proposed eight-inch line at the southwest corner of the site. The proposed eight-inch line would connect to the existing 30-inch sewer main that runs parallel to East Beamer Street, along the southern border of the project site. The proposed project would also include construction of ten new manholes distributed throughout the site.

Stormwater Drainage

Stormwater runoff from the developed portions of the site would be diverted to a grassy drainage swale that would run eastward along the southern border of the project site. The swale would continue northward along the eastern border of the site, and direct runoff through a trash removal structure that would entrain any debris. After stormwater passes through the trash removal structure, the flow would be directed to the existing stormwater basin, located north of the project site, within the remainder area. Drainage inlets and a 48-inch storm drain exists along East Beamer Street, and would not be altered by the proposed project.

Energy

Valley Clean Energy (VCE) would provide electricity to the project site. VCE electricity is transmitted through PG&E owned and operated distribution and power lines; thus, the project would connect to existing PG&E infrastructure in the project vicinity. Units would receive all-electric service, and would not receive gas service. A new PG&E utility pole would be constructed at the southwest corner of the project site, and overhead service would be established across East Beamer Street to connect to the existing utility poles. Each unit would have a service panel

and underground service to the transformer. A new pad-mounted transformer (240 or 208/120 vac) would be built, with new primary underground service connecting to the new utility pole.

Access & Parking

The neighborhood would be accessible from East Beamer Street, with 20-foot residential lanes encircling the neighborhood. An automatic sliding gate would be built at the neighborhood entrance to control site access. Street parking would be available in front of each unit, and a covered parking lot would be available for visitors to the shelter and treatment facility. The neighborhood would be accessible on foot by way of a proposed sidewalk, or with the use of YoloBus, Via, or similar ride-share programs. The proposed five-foot-wide sidewalk would be constructed from the bus-turnout on East Beamer Street into the neighborhood. Additionally, the proposed project would be accessible by bicycle lanes from the project site to downtown Woodland.

Discretionary Actions

Implementation of the proposed project would require the following discretionary actions by the County of Yolo:

- Tentative Parcel Map;
- General Plan Amendment; and
- Rezone.

Implementation of the proposed project would require the following discretionary actions by the City of Woodland:

- Approval of an Out of Agency Services Agreement;
- Approval of Sale of Property; and
- General Plan Amendment.

G. 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 area identified in the checklist. Included in each discussion are project-specific mitigation measures required, where necessary, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which mitigation has not 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.

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

Discussion

a. Examples of typical scenic vistas include 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. Yolo County and surrounding areas possess relatively flat topography, which results in few scenic vistas. Views throughout the County primarily consist of agricultural land from adjacent urban land uses. Although the project would include development within the southern portion of the parcel, the remainder parcel would remain undisturbed. Furthermore, the Yolo County General Plan does not officially designate scenic vistas within the planning area.

Based on the above, development of the proposed project would not have a substantial adverse effect on a scenic vista and would not substantially damage scenic resources. Thus, a ***less-than-significant*** impact would occur.

b. Per the California Department of Transportation, the project site is not located within the vicinity of an officially designated State Scenic Highway.[2] However, the site is located approximately 15 miles west of State Route (SR) 16, which is listed as an eligible State Scenic Highway. Because the nearest eligible State Scenic Highway, SR 16, is located 15 miles away from the project site and the site is not visible from SR 16, the proposed project would not have the potential to alter the scenic nature of SR 16. Thus, the proposed project would have ***no impact*** on scenic resources, including trees, outcroppings, and historic buildings within a State scenic highway.

c. The project site is located in proximity to industrial uses and agricultural land. Land uses in the surrounding area include vacant agricultural to the north, east, and south, as well as industrial land uses to the southwest and west of the site. The proposed project would include construction and operation of a neighborhood of either one- or two-bedroom units, or quadplexes of one-bedroom units. The proposed project would also include development of a shelter for the homeless and a residential substance abuse treatment facility. Currently, the project site is vacant and undeveloped.

[2] California Department of Transportation. *List of Eligible and Officially Designated State Scenic Highways*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed December 2019.

The project site has been designated by the City and County for development. Although a General Plan Amendment (GPA) and Rezone would be required as part of the proposed project, the GPA and Rezone would only change the type of development allowable. The proposed project would develop the previously vacant site, but such a change has been anticipated and analyzed in the Yolo County General Plan and General Plan EIR. In addition, the project site was previously disturbed for use as a drainage basin and is located near industrial buildings; thus, the site currently has low aesthetic value. While views of the project site could be altered by the proposed project, development of the proposed facilities would not further deplete the aesthetic value of the site.

All buildings would be designed to include natural colors and glazing that would comply with Title 24 of the California Building Standards Code (CBSC). Thus, the project would not substantially degrade existing views of the site and the surroundings and a ***less-than-significant*** impact would occur.

d. Due to the undeveloped nature of the site, sources of light and glare do not exist within the site. However, street lights exist along the project frontage at East Beamer Street, as well as at the intersection of CR 102 and East Beamer Street. Vehicles traveling along the roadways in the surrounding area provide additional sources of light and glare in the project area, as well as the indoor and outdoor lighting features associated with the industrial developments in the vicinity of the site.

Development of the project site with residential units, a homeless shelter, and a residential substance abuse center would involve new sources of light and glare associated with interior light spilling through windows, exterior lighting on the proposed structures, outdoor lighting in the parking areas, and light reflected off windows. The developed portion of the site would be landscaped with trees and other vegetation, which would shield some of the light and glare from the site.

Such sources of light and glare would not be substantially more intensive than what currently occurs in the vicinity of the project site. Outdoor lighting would be required to comply with Yolo County General Plan Policy CC-4.12 L, which addresses light pollution. Furthermore, Policy CC-1.3 requires preservation of rural character by controlling artificial lighting to protect the night sky as an important scenic feature. Compliance with the foregoing measures would ensure that site lighting would be properly designed to reduce the potential for excessive outdoor lighting.

Given that the new sources of light would not be more intensive than the industrial uses in the vicinity, implementation of the project would result in a ***less-than-significant*** impact with respect to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

II. AGRICULTURE AND FOREST RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	✖	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	✖
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✖
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✖
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	✖	☐

Discussion

a,e. Based on the California Department of Conservation Farmland Mapping and Monitoring Program and Figure 7-4, Farmland, in the Woodland General Plan, the project site is characterized as "Urban and Built Up Land."[3] Furthermore, the project site is considered unsuitable for agricultural uses, with the exception of forage crops for livestock, because the project site lies within a 200-year flood plain and the site has not been used for agricultural within the last 70 years. As a result, the project site would not be appropriate for use as agricultural land, and is not considered Farmland.

Under Section 8-2.404, Agricultural Conservation and Mitigation Program, of the Yolo County Zoning Code, any land within Yolo County that is substantially undeveloped and capable of agricultural production, regardless of current zoning, is defined as agricultural land, and shall be protected accordingly. Under such definition, the undeveloped project site may be considered agricultural land. However, Item (c) of the Code states that affordable housing projects where a majority of the units are affordable to very low- or low-income households shall be exempt from the provisions of the Agriculture Conversation and Mitigation Program. Therefore, the proposed project, which consists primarily of providing housing to very low-income people, would be exempt.

Based on the above, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use or involve any other changes in the existing environment which could result in conversion of Farmland to non-agricultural use. Therefore, a ***less-than-significant*** impact would occur.

[3] California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed May 2020.

b. According to the County of Yolo General Plan, the parcel is designated PQ and zoned PQP. The City of Woodland General Plan designates the site IN, and because the parcel is outside of City limits, the parcel currently does not have a City zoning designation. Because the site is not zoned by the City and is zoned PQP by the County, the project site is not zoned agriculture. In addition, the site is not under a Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning or designated agricultural uses, or a Williamson Act contract, and ***no impact*** would occur.

c,d. The project site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). While trees exist within the remainder parcel, trees do not exist within the area proposed for development. As such, the proposed project would not result in substantial adverse effects to the trees located within the remainder parcel. Thus, ***no impact*** would occur with regard to conversion of forest or agricultural land or Timberland Production.

III. AIR QUALITY. *Would the project:*		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	✖	☐
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	✖	☐
c.	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✖	☐
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	✖	☐

Discussion

a,b. Yolo County is located within the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter ($PM_{2.5}$) and the State particulate matter 10 microns in diameter (PM_{10}) standards, as well as for both the federal and State ozone standards.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, YSAQMD, along with the other air districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal AAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies.

General conformity requirements of the SIP include whether a project would cause or contribute to new violations of any federal AAQS, increase the frequency or severity of an existing violation of any federal AAQS, or delay timely attainment of any federal AAQS. In addition, a project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Emission inventories are developed based on projected increases in population, employment, regional vehicle miles traveled (VMT), and associated area sources within the region, which are based on regional projections that are, in turn, based on General Plans and zoning designations for the region.

Due to the nonattainment designations of the area, YSAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The plans include the 2013 Ozone Attainment Plan, the $PM_{2.5}$ Implementation/Maintenance Plan, and the 2016 Triennial Assessment and Plan Update. Adopted YSAQMD 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. In order to evaluate air pollutant emissions from development projects, the YSAQMD established

significance thresholds for emissions of ROG, NO_X, and PM_{10} based on existing attainment plans. Thus, by exceeding the YSAQMD's mass emission thresholds for operational or construction emissions of ROG, NO_X, or PM_{10}, a project would be considered to conflict with or obstruct implementation of the YSAQMD's air quality planning efforts. Table 1 below presents the YSAQMD's recommended thresholds of significance, which are expressed in tons/yr for ROG and NO_X and pounds per day (lbs/day) for PM_{10}. If the proposed project's emissions exceed the pollutant thresholds presented in Table 1, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Table 1
YSAQMD Thresholds of Significance

Pollutant	Construction Threshold	Operational/Cumulative Threshold
ROG	10 tons/yr	10 tons/yr
NO_X	10 tons/yr	10 tons/yr
PM_{10}	80 lbs/day	80 lbs/day

Source: YSAQMD. Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.

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, compliance with the CBSC, etc. Where project-specific information is available, such information should be applied in the model. The air quality modeling for the proposed project assumed the following project-specific information:

- Construction would begin in August 2020;
- Construction would occur over approximately one year;
- Based on the preliminary site plans, the proposed project components would encompass:
    - 23,040 sf for the residential units; and
    - 36,080 sf total for the shelter, treatment center, and neighborhood community center.
- The total area disturbed during grading, including cut and fill activities, would be 8.71 acres;
- The proposed residences would not include hearths;
- The project would increase transit accessibility by installing a bus stop within 0.1-mile of the project site;
- Internal sidewalks would improve pedestrian network connectivity; and
- The project would comply with the 2019 CBSC.

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is provided below as well. All CalEEMod results are included as Appendix A to this IS/MND.

Construction Emissions

The maximum unmitigated construction criteria air pollutant emissions resulting from construction of all structures on the project site are shown in Table 2. As shown in the table, construction emissions would be below all applicable thresholds of significance for ROG, NO_x, and PM_{10}.

Table 2
Maximum Unmitigated Construction Emissions

Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	0.51 tons/yr	10 tons/yr	**NO**
NO_X	1.74 tons/yr	10 tons/yr	**NO**
PM_{10}	20.46 lbs/day	80 lbs/day	**NO**

Source: CalEEMod, March 2020 (see appendix).

Operational Emissions

Operations of the proposed project (i.e., the neighborhood, community center, treatment facility, and shelter) would result in maximum unmitigated criteria air pollutant emissions as shown in Table 3.

Table 3
Maximum Unmitigated Operational Emissions

Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	0.71 tons/yr	10 tons/yr	**NO**
NO_X	2.94 tons/yr	10 tons/yr	**NO**
PM_{10}	8.87 lbs/day	80 lbs/day	**NO**

Source: CalEEMod, March 2020 (see appendix).

Because the proposed project's operational emissions would be below the applicable thresholds of significance, the proposed project would not be considered to conflict with air quality plans during project 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. 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 SVAB's existing air quality conditions. If a project exceeds the significance thresholds, 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. The proposed project would be below all applicable thresholds for criteria pollutants during construction and operations. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not result in a cumulatively considerable contribution to the region's existing air quality conditions.

Conclusion

Because the proposed project would not result in construction-related or operational emissions of criteria air pollutants in excess of YSAQMD's thresholds of significance, conflicts with or obstruction of the implementation of the applicable regional air quality plans would not occur. In addition, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state AAQS. Thus, a ***less-than-significant*** impact would result.

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. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors would be the single-family residences located south and west of the site.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and toxic air contaminant (TAC) emissions, which are addressed in further detail 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.

The YSAQMD recommends the use of screening thresholds to assess a project's potential to create an impact through the creation of CO hotspots. A violation of the CO standard could occur if either of the following criteria is true of any street or intersection affected by the mitigated project:[4]

- The project would reduce peak-hour level of service (LOS) on one or more streets or at one or more intersections to an unacceptable LOS (typically LOS E or F); or
- The project would increase a traffic delay by 10 or more seconds on one or more streets or at one or more intersections in the project vicinity where a peak hour LOS of F currently exists.

If either or both of the above criteria are met by the mitigated project, YSAQMD recommends performing a full CO Protocol Analysis. If the results of the CO Protocol Analysis indicate a potential impact related to CO could occur, such as in instances where

[4] Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [p. 21]. July 11, 2007.

a project would worsen operations at a signalized intersection operating at LOS E or LOS F, YSAQMD directs Lead Agencies to perform CO dispersion modeling analysis using a modeling program such as CALINE-4. If the localized CO concentrations are shown to be below the applicable AAQS, the project would not result in an impact related to localized CO concentrations.

As discussed in Section XVII, Transportation, of this IS/MND, the project is not expected to generate a significant increase in peak hour trips that would exceed the screening criteria presented above. Thus, a full CO Protocol Analysis is not required. In addition, intersections where air mixing is inhibited do not exist in proximity to the project site. As such, the proposed project would result in a less-than-significant impact related to localized CO emissions concentrations and would not expose sensitive receptors to substantial concentrations of localized CO.

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 project site are the single-family residences located south of the site, over two miles away.

The proposed 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, as discussed above, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the proposed project would likely be limited to approximately two years. All construction equipment and operation thereof would be regulated per 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.

Because construction equipment on-site would not operate for long periods of time 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. Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, the potential for any one sensitive receptor in the area to be exposed to concentrations of pollutants for a substantially

extended period of time would be low. In addition, DPM is highly dispersive with distance.[5] Considering that the nearest sensitive receptor is over two miles away, DPM is not anticipated to adversely affect any receptors. Therefore, construction of the proposed project would not be expected to expose any sensitive receptors to substantial pollutant concentrations.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to excess concentrations of localized CO or TACs during construction or operation. Therefore, the proposed project would result in a ***less-than-significant*** impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

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 section "a" through "c" above. Therefore, the following discussion focuses on emissions of odors.

According to the YSAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, composting facilities, food processing facilities, refineries, dairies, and asphalt or rending plants.[6] 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 a number of 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, quantitative analysis to determine the presence of a significant odor impact is 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 and is not located in the vicinity of any such existing or planned land uses.

Construction activities often include diesel fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction activities would be temporary and project construction would be required to comply with all applicable YSAQMD 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 be expected to occur during construction activities. Operations of residential land uses do not typically result in the generation of odors.

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[5] California Environmental Protection Agency California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

[6] Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 14]. July 11, 2007. Available at: http://www.ysaqmd.org/documents/CEQAHandbook2007.pdf. Accessed April 2019.

It should be noted that YSAQMD regulates objectionable odors through Rule 2.5 (Nuisance), which prohibits any person or source from emitting air contaminants or other material that result in any of the following: cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or have a natural tendency to cause injury or damage to business or property. Rule 2.5 is enforced based on complaints. If complaints are received, the YSAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made during construction or operations of the proposed project, the YSAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant levels.

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.

IV. BIOLOGICAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	✖	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	✖	☐
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?	☐	☐	✖	☐
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?	☐	☐	✖	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	✖	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	✖	☐

Discussion

The following discussion is primarily based off the Biological Resources Assessment prepared for the proposed project by Estep Environmental Consulting.[7] It should be noted that the Biological Resources Assessment was based on a previous iteration of the project, where the buildings were oriented in an east-to-west direction. The site plans have since been updated, and the buildings are now proposed to be configured in a north-to-south direction, as shown in Figure 2 of the Project Description. However, the Biological Resources Assessment analyzed the entire project parcel, including the remainder area. The updated building configurations remain within the remainder area, and, therefore, the conclusions and mitigation measures set forth in the original Biological Resources Assessment remain applicable to the proposed project. The Biological Resources Assessment is included as Appendix B to this IS/MND.

a. The majority of the parcel consists of nonnative annual grasses and agricultural weeds. Prior to being used for treatment ponds associated with the water treatment facility, the parcel was likely farmed, similar to the surrounding farmlands. Before the parcel was used for agriculture, the parcel was part of a large expanse of alkali seasonal wetlands and grassland prairies unique to the lowland area of Yolo County that supported several species closely associated with this now-rare natural community. Relatively undisturbed remnants of the alkali seasonal wetlands communities currently remain southeast of the City, some of which are now protected and managed as alkali sink preserves. The historic agricultural use, the more recent use for water treatment, and the current management of

[7] Estep Environmental Consulting. *Biological Resources Assessment of the City of Woodland's East Beamer Street at County 102 Parcel*. December 26, 2018.

periodic disking and inundation has likely eliminated vegetation associations with the alkali sink natural community, including species unique to this community.

The Yolo Habitat Conservancy prepared the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), which was adopted in April of 2018. The Yolo HCP/NCCP is a comprehensive, countywide conservation plan that provides permitting guidelines and mitigation for new developments over the next 50 years. Twelve sensitive species are covered under the plan based on their potential to be affected by covered activities, their occurrence in Yolo County, and plan-specific factors such as funding availability. The covered species are listed in Table 4 below.

Table 4
Yolo HCP/NCCP Covered Species

	Common Name	Scientific Name
Plants		
1	Palmate-bracted bird's beak	*Chloropyron palmatum*
Invertebrates		
2	Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*
Amphibians		
3	California tiger salamander (Central California DPS)	*Ambystoma californiense*
Reptiles		
4	Western pond turtle	*Actinemys marmorata*
5	Giant garter snake	*Thamnophis gigas*
Birds		
6	Swainson's hawk	*Buteo swainsoni*
7	White-tailed kite	*Elanus leucurus*
8	Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*
9	Western burrowing owl	*Athene cunicularia hypugaea*
10	Least Bell's vireo	*Vireo bellii pusillus*
11	Bank swallow	*Riparia riparia*
12	Tricolored blackbird	*Agelaius tricolor*

Source: Yolo Habitat Conservancy. Yolo Habitat Conservation Plan/Natural Community Conservation Plan Volume 1 Final [pg ES-8]. April 2018.

Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal and State Endangered Species Acts. Both acts afford protection to listed and proposed species. In addition, California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern, sensitive species included in USFWS Recovery Plans, and CDFW special-status invertebrates are all considered special-status species. Although CDFW Species of Special Concern generally do not have special legal status, they are given special consideration under CEQA. The factors that determine risk to a species or generally fall into one of several categories, such as habitat loss affecting the distribution and abundance of a species; environmental contaminants affecting the reproductive potential of a species; or a variety of mortality factors such as hunting or fishing, interference with man-made objects, invasive species, or toxins. In addition to regulations for special-status species, most birds in the U.S., 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. In addition, plant species on California Native

Plant Society (CNPS) Lists 1 and 2 are considered special-status plant species and are protected under CEQA.

Prior to field surveys, Estep Environmental Consultants conducted a database search to acquire information concerning known habitats and special-status species that may occur on the Project Area. The Project Area is defined as the project site and a two-mile radius outside of the border of the project site in all directions. The following sources were consulted:

- California Natural Diversity Data Base (CNDDB);
- Woodland General Plan 2035;
- Yolo County General Plan;
- Yolo County HCP/NCCP;
- eBird;
- Tricolored Blackbird Portal;
- Estep 2008; and
- Other local research, surveys, and environmental documents.

On December 20, 2018, Estep Environmental Consultants conducted a field survey to evaluate botanical and wildlife resources by walking meandering transects within all accessible areas of the project site. The survey assessed habitat suitability for special-status species, and identified potentially protected trees, aquatic features, and presence or potential presence of special-status wildlife and plants. The results of the database search and field survey are discussed below.

Special-Status Plants

The following special-status plants have the potential to occur within the project area: California alkali grass (*Puccinellia simplex*), Ferris' milk-vetch (*Astragalus tener var. ferrisiae*), alkali milkvetch (*Astragalus tener var.tener*), heartscale (*Atriplex cordulata var. cordulata*), brittlescale (*Atriplex depressa*), San Joaquin spearscale (*Extriplex joaquinana*), Heckard's peppergrass (*Lepidium latipes var. heckardii*), and saline clover (*Trifolium hydrophilum*). Each of the aforementioned species is associated with alkaline sink and alkali grassland natural communities. However, the listed special-status plants are unlikely to currently exist within the project area due to removal of the alkali grassland habitat and continued periodic disking of the parcel. Thus, implementation of the proposed project is not anticipated to result in adverse effects to special-status plants. Nevertheless, palmate-bracted bird's beak is covered under the Yolo HCP/NCCP, and is discussed below.

Palmate-bracted bird's beak (*Chloropyron palmatum*), a state and federally endangered plant, also has the potential to occur in the vicinity of the parcel. The species is unlikely to occur on the project development site due to previously mentioned removal of alkali habitat and periodic disking, but considering the endangered status and inclusion in the Yolo HCP/NCCP, the project would be required to comply with all applicable mitigation measures from the HCP.

Special-Status Wildlife

According to the CNDDB search, six special-status wildlife species had reported occurrences in the vicinity of the project area. The species that have the potential to inhabit the project site based on habitat suitability are discussed in further detail below.

Swainson's Hawk

The Swainson's hawk is generally associated with flat, open landscapes, and is relatively common in Yolo County during the spring-summer breeding season. Over 25 documented nest sites have occurred within five miles of the project site. While suitable nest trees were not identified within the project site, the majority of the parcel is considered suitable foraging habitat. Implementation of the proposed project would impact the species through loss of suitable foraging habitat. The Swainson's hawk is covered under the Yolo HCP/NCCP.

White-tailed Kite

The while-tailed kite typically nests in riparian forests, woodlands, and occasionally in isolated trees. The species forages in grasslands, seasonal wetlands, and agricultural land. White-tailed kites were not detected during the site survey and nests have not been reported within the vicinity of the parcel, but the entire parcel is considered suitable foraging habitat for the species. Implementation of the proposed project would impact the species through loss of suitable foraging habitat. The white-tailed kite is covered under the Yolo HCP/NCCP.

Mountain Plover

The mountain plover, a state species of special concern, roosts and forages in short grass prairies, pastureland, grazed grassland, and agricultural fields. Although on-site occurrences have not been reported since 1970, recent sightings have been reported in close proximity to the site and the vegetation height and density is consistent with suitable winter habitat requirements. However, the Biological Resources Assessment concludes that the mountain plover is not expected to occur on the project site. Implementation of the proposed project would remove 8.5 acres of potentially suitable winter habitat for the species. However, due the relatively small acreage and the lack of recent winter occurrences on or in the immediate vicinity of the project site, this habitat loss would not represent a significant impact and would not be in conflict with City or Yolo County General Plan policies.

Western Burrowing Owl

The western burrowing owl occurs in open, dry grasslands and agricultural or desert habitats. In the California Central Valley, the wester burrowing owl is often associated with pastureland and agricultural fields. The species typically occupy the burrows created by California ground squirrels for nest space, and are also known to nest in open pipes and small culverts. A majority of the project parcel represents suitable habitat for foraging, and where ground squirrels are present, for burrowing. A burrowing owl was detected within the project site during the field survey, using a winter burrow. Due to the relatively small size, the loss of foraging habitat that would result from implementation of the proposed project does not represent a significant impact. However, removal of occupied habitat and/or the removal of an active winter burrow is considered a significant impact due to the species' restricted range and declining populations. In addition, the western burrowing owl is covered under the Yolo HCP/NCCP.

Tricolored Blackbird

A state-listed threatened species, the tricolored blackbird, have three basic requirements for breeding: open accessible water, a protected nesting substrate (flooded or thorny vegetation), and a foraging space with adequate prey near the nesting colony. Although

there are not records of occurrence within the project site, the northwest portion of the project area could provide suitable breeding habitat for tricolored blackbirds, and the grassland throughout the remainder of the site is considered suitable foraging habitat. Limited potential exists for breeding to occur in the seasonal wetland habitat in the northwest quadrant of the parcel within approximately 1,000 feet from the project site. Although the project would not directly affect this area, noise disturbances from construction could have indirect effects if a breeding colony were established. The tricolored blackbird is covered under the Yolo HCP/NCCP.

MBTA Protected Species

The project site would be considered suitable habitat for the short-eared owl and loggerhead shrike. However, neither species was detected during on-site surveys, and records of the species nesting on-site or in the immediate vicinity do not exist. The grassland and ruderal areas of the site represent suitable nesting and foraging habitat for northern harriers. The northern harrier is known to occur onsite, and inadvertent destruction of an action nest would be a violation of violation of Fish and Game Code 3503.5 and would be in conflict with Yolo County General Plan Policy CO-2.38.

Conclusion

Based on the discussion above, implementation of the proposed project could potentially affect the following special-status plants and wildlife species: Palmate-bracted bird's beak, Swainson's hawk, white-tailed kite, western burrowing owl, tricolored blackbird, and MBTA protected species. Thus, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Therefore, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

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

IV-1 *Prior to the issuance of building permits, the developer shall pay the applicable Yolo HCP/NCCP mitigation fee to Yolo County in compliance with County Code Section 10-13.5.*

Palmate-bracted Bird's-Beak

AMM11 *Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak*

IV-2 *Palmate-bracted bird's-beak is covered by the Yolo HCP/NCCP only for the removal of suitable habitat and not for the removal of palmate-bracted bird's beak plants. This mitigation measure ensures compliance with this provision. To determine if palmate-bracted bird's-beak is present and could be affected, the project proponent shall conduct a planning-level survey for this species for any covered activities to be conducted within 250 feet of suitable habitat. The survey shall be conducted within 45 days prior to the commencement of construction activities if construction is to commence during the period from May 31 to September 30, and shall be consistent with protocols for surveying and evaluating impacts to Special Status Native Plant Populations and Natural Communities. The project proponent*

shall avoid occupied habitat where palmate-bracted bird's beak has been located within any of the last 15 years. Results of the survey shall be submitted to the City's Community Development Department for review.

The project proponent also shall avoid any new occurrences of this species identified during planning-level surveys. Avoidance shall require a 250-foot setback from the occupied habitat, or greater distance depending on site-specific topography to avoid hydrologic effects. A shorter buffer distance may apply if is determined to avoid effects and is approved by the Conservancy, USFWS, and CDFW. Mortality of palmate-bracted bird's beak individuals shall be avoided, except as needed through management activities that provide an overall benefit to the species.

Swainson's Hawk and White-tailed Kite

AMM16 *Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite*

IV-3 *The project proponent shall retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership shall be surveyed only if access is granted or if the parcels are visible from authorized areas. Results of the survey shall be submitted to the City's Community Development Department for review.*

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent shall retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee, between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey shall be submitted to the Conservancy and CDFW.

If active nests are found during preconstruction surveys, a 1,320- foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist shall monitor the nest and shall, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior.

Western Burrowing Owl

AMM18 Minimize Take and Adverse Effects on Western Burrowing Owl

IV-4 *The project proponent shall retain a qualified biologist to conduct planning-level surveys within 45 days prior to the commencement of construction activities, and identify western burrowing owl habitat within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines. Results of the survey shall be submitted to the City's Community Development Department for review.*

If burrowing owls are identified during the planning-level survey, the project proponent shall minimize activities that would affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a non-disturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this non-disturbance buffer could range from 150 to 1,500 feet, depending on the time of year and the level of disturbance, based on current guidelines. The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- *Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.*
- *Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.*
- *High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.*

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the

project proponent shall retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist shall conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines. The qualified biologist shall conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities shall trigger subsequent surveys prior to ground disturbance.

If the biologist finds the site to be occupied by western burrowing owls during the breeding season (February 1 to August 31), the project proponent shall avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops a mitigation monitoring plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- *The Conservancy, CDFW, and USFWS approves the mitigation monitoring plan provided by the project proponent.*
- *A qualified biologist shall monitor the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).*
- *The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.*
- *If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.*
- *If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the non- disturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.*

If evidence of western burrowing owl is detected outside the breeding season (September 1 to January 31), the project proponent shall establish a non-disturbance buffer around occupied burrows, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- *A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).*
- *The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.*
- *If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.*
- *If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed and construction may continue.*

Monitoring shall continue as described above for the nonbreeding season as long as the burrow remains active.

A qualified biologist shall monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season. Exclusion and burrow closure shall not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, the project proponent shall develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods shall be designed as described in the species monitoring guidelines and consistent with the most up-to-date checklist of passive relocation techniques. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors shall be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist shall collapse the burrow to prevent reoccupation. Burrows shall be excavated using hand tools. During excavation, an escape route shall be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows shall be constructed

prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.

Tricolored Blackbird

AMM21 Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird

IV-5 The project proponent shall retain a qualified biologist to identify and quantify (in acres) tricolored blackbird nesting and foraging habitat within 1,300 feet of the footprint of the covered activity, within 45 days prior to the commencement of construction activities. If a 1,300-foot buffer from nesting habitat cannot be maintained, the qualified biologist shall check records maintained by the Conservancy (which shall include CNDDB data, and data from the tricolored blackbird portal) to determine if tricolored blackbird nesting colonies have been active in or within 1,300 feet of the project footprint during the previous five years. If there are no records of nesting tricolored blackbirds on the site, the qualified biologist shall conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30. Results of the survey shall be submitted to the City's Community Development Department for review.

Operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season (March 1 to July 30) do not need to conduct planning or construction surveys or implement any additional avoidance measures. If an active tricolored blackbird colony is present or has been present within the last five years within the planning-level survey area, the project proponent shall design the project to avoid adverse effects within 1,300 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW. If a shorter distance is approved, the project proponent shall still maintain a 1,300-foot buffer around active nesting colonies during the nesting season but may apply the approved lesser distance outside the nesting season. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

Raptors and Nesting Migratory Birds

IV-6 The project proponent shall implement the following measures to avoid or minimize impacts to raptors and federally-protected nesting migratory birds:

- *If any site disturbance or construction activity for any phase of development begins outside the February 1 to August 31 breeding season, a preconstruction survey for active nests shall not be required.*
- *If any site disturbance or construction activity for any phase of development is scheduled to begin between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for active nests from publicly accessible areas within 14 days prior to site disturbance or construction activity for any phase of development. The survey area shall cover the construction site and*

the area surrounding the construction site, including a 100-foot radius for MBTA birds, and a 500-foot radius for birds of prey. If an active nest of a bird of prey, MBTA bird, or other protected bird is not found, then further mitigation measures are not necessary. The preconstruction survey shall be submitted to the City of Woodland Community Development Department for review.

- *If an active nest of a bird of prey, MBTA bird, or other protected bird is discovered that may be adversely affected by any site disturbance or construction or an injured or killed bird is found, the project applicant shall immediately:*
    - *Stop all work within a 100-foot radius of the discovery.*
    - *Notify the City of Woodland Community Development Department.*
    - *Do not resume work within the 100-foot radius until authorized by the biologist.*
    - *The biologist shall establish a minimum 500-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey. The ESA may be reduced if the biologist determines that a smaller ESA would still adequately protect the active nest. Further work may not occur within the ESA until the biologist determines that the nest is no longer active.*

b,c. An assessment of aquatic ecosystems and riparian habitat within the project vicinity was conducted as part of the Biological Resources Assessment prepared by Estep Environmental Consultants. The report concluded that the flooded basin within the project parcel could be considered a managed seasonal wetland because the basin is likely dry during warm months and periodically flooded during the rainy season (see Figure 4). The dense cover in the wetland area may also provide important cover habitat for many other birds, mammals, and reptiles. The managed seasonal wetland is located within the remainder parcel, and would not be disturbed during development of the proposed project.

Riparian habitat refers to the ecosystem found along a moving body of water, such as a river or stream. Water channels that include vegetation that may be considered riparian habitat exist along the northern and western perimeter of the parcel. The channels support patches of wetland vegetation and adjacent ruderal vegetation along their banks, and provide habitat for wetland-associated wildlife species such as red-winged blackbird. The channels are highly disturbed because the channels are periodically cleared of vegetation to maintain water flow, and would not be disturbed during project development. Thus, the riparian habitat would not be affected by the proposed project.

A seasonal wetland and two channels exist within the remainder parcel (see Figure 4). Structures would not be built nor any other form of disturbance near the aforementioned aquatic features, and thus, the associated habitat would not be influenced. Therefore, the proposed project would not have a substantial adverse effect on riparian habitat, sensitive natural communities, or federally protected wetlands, and a ***less-than-significant*** impact could occur.

Figure 4
Land Use and Cover Types



Source: Estep Environmental Consulting. Biological Resources Assessment of the City of Woodland's East Beamer Street at County 102 Parcel [pg 7]. December 26, 2018.

d. The project site is unlikely to act as a movement corridor because industrial developments exist directly to the west and southeast of the site. The proposed project includes construction of a multiple roads within the project site, which could pose a threat to the movement of certain wildlife species if they were trapped or struck by vehicular traffic. However, the proposed project would only occupy one portion of the entire parcel, and the remainder parcel would not be affected. If an animal were required to migrate across the project site, the animal could do so by way of the unaffected remainder parcel adjacent to the project development. As such, the 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. Thus, a ***less-than-significant*** impact would occur.

e. Willow and cottonwood trees are located in the northwest portion of the project area, and several olive trees are along CR 102. The trees are all within the remainder parcel, and would not be removed or impacted by the proposed project. As a result, the proposed project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and a ***less-than-significant*** impact would occur.

f. The project site falls within the boundaries of the Yolo HCP/NCCP, which establishes an effective framework to protect natural resources in Yolo County, while improving and streamlining the environmental permitting process for impacts on special status species and provides guidance for the mitigation of impacts to covered species. Applicable Avoidance and Minimization Measures for palmate-bracted bird's-beak, Swainson's hawk and white-tailed kite, western burrowing owl, and tricolored blackbird as adapted from Chapter 4 of the Yolo HCP/NCCP, have been included in Mitigation Measures IV-2 through IV-5 of this IS/MND. Per Sec. 10-13.6, Yolo County may collect service fees from project applicants to compensate for direct and indirect costs associated with administration and implementation of the Yolo HCP/NCCP and related permitting processes.[8] In addition, the developer shall be required to pay all applicable fees per Section 8.4.1 of the HCP/NCCP, as required by Mitigation Measure IV-1. Therefore, the proposed project would not conflict with the applicable provisions of the Yolo HCP/NCCP and a ***less-than-significant*** impact would occur related to conflicts with an adopted HCP, NCCP, or other approved local, regional, or State HCP.

[8] Yolo County. *Yolo County Code of Ordinances: Title 10, Chapter 13, Section 10-13.6. Service Fees.* Available at: http://library.amlegal.com/nxt/gateway.dll/California/yolocounty_ca/yolocountycacodeofordinances?f=templates$fn=default.htm$3.0$vid=amlegal:yolocounty_ca. Accessed November 25, 2019.

V. CULTURAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	✖	☐	☐
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	✖	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	☐	✖	☐	☐

Discussion

The following discussion is based on the Cultural Resources Study prepared for the proposed project by Tom Origer & Associates.[9] The Cultural Resources Study was based on the previous iteration of the project, as described in Section IV, Biological Resources, of this IS/MND. The site plans have since been updated, and the buildings are now proposed to be configured in a north-to-south direction, as shown in Figure 2 of the Project Description. Although the Cultural Resources Study analyzed disturbance of the site under the original configuration, due to the significant overlap between the original project site and the updated project site, the conclusions and mitigation measures set forth remain applicable to the proposed project. The Cultural Resources Study is included as Appendix C to this IS/MND.

a,b,c. Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

Tom Origer & Associates requested a cultural resource records search that was conducted by the Northwest Information Center (NWIC) at Sonoma State University. Cultural resources have not been recorded within a 0.25-mile radius of the project site. To gather information about potential historical or archeological resources within the project site, Tom Origer & Associates also contacted the Native American Heritage Commission (NAHC) requesting information regarding a search of their Sacred Lands Files (SLF). The search of the SLF indicated negative results for sacred sites within the project area and/or vicinity.

A USGS map from 1954 shows a wastewater treatment facility and associated ponds north of the project site. By 1993, the wastewater treatment facility was not present anymore, but the ponds remain to this day. The historical map shows that the parcel has been previously disturbed, and known uses from the past 75 years are not considered historically significant. In addition, structures from that period do not exist, and development of the site would not influence any potentially historic structures.

A field survey of the site was conducted by Tom Origer & Associates on October 14, 2019. The pedestrian survey was conducted by walking in transects measuring approximately

[9] Tom Origer & Associates. *Cultural Resources Study for the East Beamer Way Project, Woodland, Yolo County, California.* October 22, 2019.

15 meters apart. In addition, two four-inch diameter auger holes were drilled to a depth of 120 and 150 centimeters to examine subsurface properties. Archaeological site indicators were not observed during the course of the survey. Because archaeological resources were not identified during the aforementioned searches, the project site is considered to have low potential for the discovery of archaeological resources.

While historic resources have not been recorded at the project site, the potential exists for previously undiscovered resources to occur on-site. Therefore, if previously undiscovered resources are found during construction, the proposed project could cause a substantial adverse change in the significance of a historic or archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of formal cemeteries during construction, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)

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

V-1 *Prior to the approval of the improvement plans, the project's improvement plans shall include notes indicating that a Native American tribal resources monitor shall be present on behalf of the Yocha Dehe Wintun Nation during initial ground disturbing activities. If buried materials are encountered, all soil disturbing work shall be halted at the location of any discovery until a qualified archaeologist completes a significance evaluation of the find(s) pursuant to Section 106 of the National Historic Preservation Act (36CFR60.4). If the resource is also a tribal cultural resource the Native American tribal resources monitor shall evaluate the significance of the find and determine an appropriate course of action, subject to approval by the City. The consultation tribe(s) will also require notification and opportunity to consult on the findings. This shall be conducted in accordance with the City and land owner. Ground disturbing work in the vicinity of the find shall not occur until the resource has been evaluated, if the resource is found eligible for CRHR and avoidance is not feasible then an evaluation and/or data recovery mitigation program shall be drafted and implemented. The archaeologist shall be required to submit a report of findings to the City's Community Development Department for review.*

Prehistoric archaeological site indicators expected within the general area include: chipped chert and obsidian tools and tool manufacture waste flakes; grinding and hammering implements that look like fist-size, river-tumbled stones; and for some rare sites, locally darkened soil that generally contains abundant archaeological specimens. Historical remains expected in the general area commonly include items of ceramic, glass, and metal. Features that might be present include structure remains (e.g., cabins or their foundations) and pits containing historical artifacts.

V-2 *Prior to the approval of the improvement plans, the project's improvement plans shall include notes (per Public Resources Code 5097.97, Health and Human Safety Section 7050.5(b) of the California Health and Safety Code, and pursuant to CEQA Guidelines Section 15064.5(d)) indicating that if human remains are encountered, excavation or disturbance of the location*

shall be halted in the vicinity of the find, and the Yolo County Coroner contacted. If the Coroner determines the remains are Native American, the Coroner shall contact the NAHC. The NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent (MLD) shall provide recommendations regarding the treatment of the remains with appropriate dignity (refer to PRC 5097.94 for complete guidelines).

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

Discussion

a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards 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 of the proposed project are provided below.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the California Building Standards Code (CBSC) that became effective on January 1, 2020. The purpose of the CALGreen 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 CALGreen 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;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board; and
- 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, which went into effect on January 1, 2020, build upon energy efficiency measures from the 2016 Building Energy Efficiency Standards resulting in a reduction in energy consumption from the 2016 standards for

residential and commercial structures. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved through various regulations including requirements for the use of high efficiency lighting, improved water heating system efficiency, and high-performance attics and walls.

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, like the proposed project, include on-site solar energy systems capable of producing 100 percent of the electricity demanded by the residences.

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 meet additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the sites where energy supply cannot be met via a hookup to the existing electricity grid.

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. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

The CARB has recently prepared the *2017 Climate Change Scoping Plan Update* (2017 Scoping Plan),[10] 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 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 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

[10] California Air Resources Board. *The 2017 Climate Change Scoping Plan Update.* January 20, 2017.

energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Following implementation of the proposed project, Valley Clean Energy (VCE) would provide electricity to the project site. Energy use associated with operation of the project would be typical of residential uses, requiring electricity 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 residences, employees, and visitors to the proposed facilities.

The proposed residential project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen 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 CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project through VCE would be 75 percent carbon free and 42 percent renewable.[11] Thus, a portion of the energy consumed during project operations would originate from renewable sources, and the project would thereby comply with all state or local plans for renewable energy use. In addition, the proposed project is intended to be all-electric, and natural gas appliances or hearths would not be included.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, the proposed project includes construction of a Yolobus stop along East Beamer Street. The project also includes a plan for the property managers to operate a shuttle to and from bus stops to further encourage public transit use. The site's access to public transit would reduce total vehicle miles traveled (VMT) and tail pipe emissions compared to dependency on private motor vehicle. Less than forty percent of residents who qualify for the permanent supportive housing, own or lease private motor vehicles and at least a third rely on bicycles for daily mobility. Furthermore, the project would include construction of sidewalks connecting the residential units and supportive structures, and along the project frontage at East Beamer Street, thereby providing for increased pedestrian connectivity throughout the area and resulting in reduced vehicle use.

Conclusion

Based on the 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.

[11] Valley Clean Energy. *Standard Green*. Available at: https://valleycleanenergy.org/energy-choices/standard-service/. Accessed November 21, 2019.

VII. GEOLOGY AND SOILS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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.	☐	☐	✖	☐
ii. Strong seismic ground shaking?	☐	☐	✖	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	✖	☐
iv. Landslides?	☐	☐	✖	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	✖	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	✖	☐
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	✖	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	✖
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	✖	☐	☐

Discussion

The following discussion is based primarily on the Geotechnical Engineering Report prepared for the proposed project by Wallace Kuhl & Associates.[12] The Geotechnical Engineering Report was based on the previous iteration of the project, where the buildings were oriented in an east-to-west direction. The site plans have since been updated, and the buildings are now proposed to be configured in a north-to-south direction, as shown in Figure 2 of the Project Description. Although the Geotechnical Engineering Report analyzed soils beneath the original disturbance area, due to the significant overlap between the original project site and the updated project site, the conclusions and mitigation measures set forth remain applicable to the proposed project. The Geotechnical Engineering Report is included as Appendix D to this IS/MND.

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c. The proposed project's potential effects related to fault rupture/seismic ground shaking, liquefaction, landslides, lateral spreading, and subsidence/settlement are discussed below.

[12] Wallace Kuhl & Associates. *Geotechnical Engineering Report: East Beamer Street Housing Project*. January 29, 2020.

Fault Rupture / Seismic Ground Shaking

Based on the Department of Conservation's Geologic Hazards and Data map, the project site is not located near any known faults or in a designated Alquist-Priolo Fault Zone.[13] According to the Woodland General Plan, the nearest fault zone is the Concord-Green Valley fault, located approximately 27 miles west of Woodland.[14] Considering the project site is east of Woodland City limits, the fault line is over 27 miles away. In addition, the CBSC includes specific safety and design standards for new structures to resist the forces of seismic activity. The proposed project would be required to comply with the geotechnical and seismic design criteria included in the CBSC. Considering the project site has a low risk of seismic shaking and is required to comply with the CBSC, the proposed project would not be subject to hazards from rupture of a known earthquake fault or strong seismic ground shaking.

Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as that imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded and fine-grained sands. According to the liquefaction hazards map produced by the USGS, the Woodland area is not shown to be in a liquefaction hazard zone. The soil conditions encountered at the recent and previous explorations at or near the site indicate that the project site is predominantly underlain by relatively stiff, fine-grained soils or relatively dense, granular soils. Such soils are typically resistant to liquefaction during seismic ground shaking events. As such, the potential for liquefaction of the soil underlaying the project site is considered low.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The topography of the project site is relatively level, and the site is not located on or near any slopes. Furthermore, per the Geologic Hazards Map, the site is not located within a designated seismic hazard zone for landslides.[15] Thus, landslides are not likely to occur on- or off-site as a result of the proposed project.

Lateral Spreading

Lateral spreading is horizontal 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. The project site does not contain any open faces that would be considered susceptible to lateral spreading.

Subsidence / Settlement

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. Because Yolo County exists on a large groundwater basin, the region is subject to subsidence due to water pumping.

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[13] California Department of Conservation. *Geologic Hazards Data & Maps*. Available at: https://maps.conservation.ca.gov/geologichazards/. Accessed November 1, 2019.

[14] City of Woodland. *General Plan Update 2035*. May 16, 2017.

[15] California Department of Conservation. *Geologic Hazards Data & Maps*. Available at: https://maps.conservation.ca.gov/geologichazards/. Accessed November 1, 2019.

The Water Resources Association of Yolo County has conducted several monitoring reports to track subsidence throughout the County. From 2008 to 2016, rates of subsidence, which vary from year to year, averaged 3 cm per year in the most heavily affected locations of the County.[16] However, the CBSC includes standards to reduce risks associated with subsidence/settlement. In addition, the fill that would be used to elevate the project site would be designed to minimize the potential for subsidence and settlement. Given that the proposed project would be built in accordance with the CBSC, the potential for subsidence to pose a substantial risk to the proposed development is relatively low.

Conclusion

Based on the above, the proposed project would not be subject to substantial risks related to fault rupture/seismic ground shaking, liquefaction, landslides, lateral spreading, and subsidence/settlement. Compliance with standard construction regulations included in the CBSC would ensure that the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction, subsidence, or settlement, and would not 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 subsidence, liquefaction, or collapse. Thus, a ***less-than-significant*** impact would occur.

b. Issues related to erosion and degradation of water quality during construction are discussed in Section X, Hydrology and Water Quality, of this IS/MND, under question 'a'. In addition, Section X includes further discussion of the cut and fill activities associated with the proposed project. As noted therein, the proposed project would not result in substantial soil erosion or the loss of topsoil. Thus, a ***less-than-significant*** impact would occur.

d. Expansive soils can undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted. Highly expansive soils prone to shrink/swell activity could have adverse effects on structures constructed on such soils. Per the United States Department of Agriculture Web Soil Survey, the project site consists of a majority Sycamore silty clay loam.[17] The Geotechnical Engineering Report notes that laboratory testing of two representative near-surface clay samples revealed the soils to possess low plasticity and Expansion Index values of 43 and 47, which is the high end of "low expansion potential." As such, the on-site soils have the potential to be expansive. If soil settling or contraction were to occur on-site, the proposed buildings and foundations may be compromised, and damage to the structures could follow.

Given the existence of potentially expansive soils within the project site and the subsequent risk of damage to the proposed structures, implementation of the proposed project could create substantial direct or indirect risks to life or property, and a ***potentially significant*** impact could occur.

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16 Water Resources Association of Yolo County. *Yolo County Subsidence Network: 2016 Monitoring Event*. 2016.

17 United States Department of Agriculture Natural Resources Conservation Service. *Web Soil Survey*. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed November 20, 2019.

Mitigation Measure(s)

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

VII-1 *The project design shall comply with all recommendations included in the Geotechnical Report prepared for the proposed project by Wallace & Kuhl Associates. Compliance with such recommendations shall be demonstrated on all applicable improvement plans submitted for the project site. Improvement plans shall be submitted to the County Engineer for review and approval.*

e. The proposed project would not include installation of septic systems on-site. Instead, the wastewater generated on-site from the proposed structures would connect to existing sewage mains in the project vicinity. Thus, the project would have ***no impact*** related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

f. The project site is located on previously developed land, and known unique paleontological or geological features do not exist on-site. However, if a unique paleontological resource or unique geologic feature were to be found during construction, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

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

VII-2 *If any unique paleontological or geological features are identified during ground-disturbing activities associated with the proposed project, all work within 100-feet of the finding shall be halted until a qualified paleontologist or geologist can review and assess the nature of the find. No ground disturbing work in the vicinity of the find shall occur until the resource has been evaluated. The paleontologist or geologist shall be required to submit a report of findings to the City's Community Development Department for review.*

VIII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	✖	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	✖	☐

Discussion

a,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 GHGs 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_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity), 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_2 equivalents ($MTCO_2e$/yr).

Regulatory Context

A number of regulations currently exist related to GHG emissions, predominantly Assembly Bill (AB) 32, Executive Order S-3-05, and Senate Bill (SB) 32. AB 32 sets forth a statewide GHG emissions reduction target of 1990 levels by 2020. Executive Order S-3-05 sets forth a transitional reduction target of 2000 levels by 2010, the same target as AB 32 of 1990 levels by 2020, and further builds upon the AB 32 target by requiring a reduction to 80 percent below 1990 levels by 2050. SB 32 also builds upon AB 32 and sets forth a transitional reduction target of 40 percent below 1990 levels by 2030. In order to implement the statewide GHG emissions reduction targets, local jurisdictions are encouraged to prepare and adopt area-specific GHG reduction plans and/or thresholds of significance for GHG emissions. The County of Yolo adopted the Yolo County Climate Action Plan (CAP) in 2011, which is designed to place the community on a path to achieve GHG emissions reductions targets and includes a comprehensive strategy for reducing GHG emissions to 80 percent below 1990 levels by the year 2050.

The proposed project is located within the jurisdictional boundaries of YSAQMD The YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts* handbook includes screening methodology and recommended thresholds of significance, including mass

emission thresholds for construction-related and operational criteria pollutants.[18] However, the YSAQMD has not yet established or adopted methodology or thresholds for the assessment of impacts related to GHG emissions. In the absence of District-adopted methodology or thresholds for assessing GHG emissions, the YSAQMD is currently recommending GHG analysis consistent with the Sacramento Metropolitan Air Quality Management District (SMAQMD) adopted thresholds of significance. 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 SMAQMD has established a threshold of significance for both construction and operational GHG emissions of 1,100 $MTCO_2e$/yr. If a local jurisdiction has adopted specific GHG thresholds of significance or plans to reduce GHG emissions, SMAQMD recommends such local regulations be used to establish a project's potential effect. As such, the SMAQMD threshold of significance of 1,100 $MTCO_2e$/yr will be used to evaluate construction GHG emissions, and project consistency with the Yolo County CAP will be used to evaluate operational GHG emissions.

GHG emissions resulting from construction and operations of the proposed project were modeled using the CalEEMod emissions model under the same assumptions as discussed in Section III, Air Quality, of this IS/MND. In order to evaluate the project's consistency with California's goals, the CO_2 intensity factor within CalEEMod was adjusted to reflect PG&E's progress towards achieving the State's Renewable Portfolio Standard (RPS) goals for the year applicable to each phase. Each phase of the proposed project and the associated GHG emissions is discussed below, and all modeling outputs are included in the appendix to this IS/MND.

Construction

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. Nonetheless, construction-related GHG emissions have been estimated for implementation of the proposed project, and are presented below.

Construction of the project would include building the residences, community center, shelter, treatment center, and associated improvements. Construction is anticipated to occur during the years 2020 and 2021, with maximum emissions expected to occur during 2021. The maximum annual unmitigated GHG emissions related to construction for each year are presented in Table 5.

Table 5
Maximum Annual Construction GHG Emissions

Year	Construction GHG Emissions ($MTCO_2e$/yr)	Threshold of Significance ($MTCO_2e$/yr)	Exceeds Threshold?
2020	253.52	1,100	**NO**
2021	426.30	1,100	**NO**

Source: CalEEMod, March 2020 (see Appendix).

[18] Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

As shown above, the proposed project's maximum annual unmitigated construction-related GHG emissions would be well below the applicable 1,100 $MTCO_2e$/yr threshold. Because the maximum annual and total construction GHG emissions for the project would be below the identified threshold of significance, the proposed project would not be considered to generate construction-related GHG emissions that would have a significant impact on the environment.

Operations

The emissions of GHGs resulting from operations of the proposed project were estimated using CalEEMod, and are presented below. The results are presented for informational purposes only, because, as discussed above, the determination of significance for operational emissions will be based on consistency with the Yolo County CAP.

The estimated unmitigated operational GHG emissions at full buildout of the proposed project in the year 2022 are presented in Table 6 below. It should be noted that mobile GHG emissions make up over 80 percent of total annual emissions. Considering the intended population of the proposed project, vehicle ownership is expected to be low.

Table 6
Unmitigated Project Operational GHG Emissions

Emission Source	Annual GHG Emissions ($MTCO_2e$/yr)
Area	3.16
Energy	231.60
Mobile	1,790.26
Solid Waste	93.81
Water	38.08
TOTAL ANNUAL GHG EMISSIONS	**2,156.91**

Source: CalEEMod, March 2020 (see Appendix).

Applicable Climate Action Plans

The Yolo County 2030 General Plan, published in 2009, required the creation and implementation of a Climate Action Plan (CAP). As such, the Yolo County CAP was adopted in March of 2011, and includes a comprehensive strategy for reducing GHG emissions to 80 percent below 1990 levels by the year 2050.[19] Several programs are proposed to meet the goal, including measures such as increasing renewable energy generation, improving water and energy conservation strategies, expanding alternative transportation, and planting trees.[20] In addition, the City of Woodland adopted a CAP in May of 2017, which includes similar measures for GHG emissions reductions.

The Yolo County CAP divides reduction measures into the following chapters: Agriculture; Transportation and Land Use; Energy; Solid Waste and Wastewater; and Adaptation. Considering the proposed project would not include agricultural uses, the measures within the Agriculture chapter would not apply. In addition, the measures included in the Adaptation chapter are targeted for implementation at a County-wide scale, and are not

[19] Yolo County. *Yolo County Climate Action Plan: A Strategy for Smart Growth Implementation, Greenhouse Gas Reduction, and Adaptation to Global Climate Change*. March 15, 2011.

[20] Yolo County. *Climate Action Plan*. Available at: https://www.yolocounty.org/community-services/planning-public-works/planning-division/climate-action-plan. Accessed January 9, 2020.

applicable to individual projects, such as the proposed East Beamer Way Neighborhood Campus. The same is true for the City of Woodland CAP. Consequently, measures that are not relevant or applicable to the proposed project are not included in the consistency discussion below.

For this analysis, the Yolo County CAP and the City of Woodland CAP represent the applicable plans adopted for the purpose of reducing the emissions of greenhouse gases. The project's consistency with all applicable reduction measures is assessed in Table 7 and Table 8 below. In addition, the adopted City of Woodland Climate Action Plan Consistency Checklist in included as Appendix E to this IS/MND.

Table 7
Project Consistency with the Yolo County Climate Action Plan

Reduction Measure	Consistency Discussion
Project Operations	
Measure T-1: Reduce vehicle miles traveled (VMT) associated with new developments.	The proposed project includes construction of a bus turnout along East Beamer Street, as well as other public transit options for the residents. By encouraging the use of public transit, the need for the use of single passenger vehicles would be reduced. The project also includes plans for a sidewalk networks throughout the site, and bicycle lanes exist connecting the project site to central Woodland. In addition, the trip generation rate for the anticipated population would be lower than the trip generation rate for the current land use. In other words, development of the project site with the proposed East Beamer Way Neighborhood Campus would result in lower VMT compared to development of the site with a different allowable land use, such as a public office or a school. Therefore, the project would reduce VMT and comply with Measure T-1.
Measure E-3: Reduce energy consumption in new residential and non-residential units.	The 2019 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy efficiency measures from the 2016 Building Energy Efficiency Standards resulting in a seven percent reduction in energy consumption from the 2016 standards for residential structures and a 30 percent reduction in energy consumption from the 2016 standards for commercial structures. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls. The project would be required to comply with these building requirements and would thus comply with Measure E-3. It should be noted that the CBSC serves to implement the State's energy efficiency goals; thus, compliance with the CBSC standards would ensure that the proposed project would comply

Table 7
Project Consistency with the Yolo County Climate Action Plan

Reduction Measure	Consistency Discussion
	with all relevant State programs related to energy efficiency.
Measure E-4: Increase on-site renewable energy generation to reduce demand for grid energy.	The project applicant has not yet committed to on-site renewable energy generation. However, compliance with the 2019 CBSC mandates that the residences on the project site would be serviced with 100 percent renewable energy generated on-site. The other buildings on-site are not required to use renewable energy generated on-site. However, the connection to VCE would entail that a portion of electricity would come from renewable sources. Thus, the project would support on-site renewable energy generation for the residences and partially comply with the suggested measure.
Measure E-7: Promote weather-based irrigation systems and water efficient turf management.	Under the CAL Green Code, 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. The proposed project would be required to comply with the outdoor water use efficiency regulations within the CAL Green Code. Thus, the proposed project would comply with the suggested measure.

Source: Yolo County Climate Action Plan, 2011.

Table 8
Project Consistency with the Woodland Climate Action Plan

Reduction Measure	Consistency Discussion
Strategy E-1: Lighting Efficiency Upgrades	Title 20 and Title 24 of the California Code and Regulations require the use of energy efficient appliances and building systems, including lighting 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 comply with the suggested measure.
Strategy E-2: Appliance/Office Equipment Upgrades	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 and Regulations. As such, the project would comply with the suggested measure.
Strategy E-3: Comprehensive Building Efficiency	Once again, the proposed project would comply with all energy efficiency standards set forth in Title 20 and Title 24 of the California Code and Regulations. As such, the project would comply with the suggested measure.
Strategy E-4: Improved Building Temperature Controls	Two suggested improvements under this measure includes the installation of cool roofs and energy efficient heating and cooling equipment. The applicant has not committed to the installation of cool roof technology. However, pursuant to

Table 8
Project Consistency with the Woodland Climate Action Plan

Reduction Measure	Consistency Discussion
	CALGreen standards, the proposed project would be required to install energy efficient heating and cooling appliances. As such, the project would partially comply with this suggested measure.
Strategy E-6: Renewable Energy Generation and Procurement	The project applicant has not yet committed to on-site renewable energy generation. However, compliance with the 2019 CBSC mandates that the residences on the project site would be serviced with 100 percent renewable energy generated on-site. The other buildings on-site are not required to use renewable energy generated on-site. However, the connection to VCE would ensure that a portion of electricity would come from renewable sources. Thus, the project would support on-site renewable energy generation for the residences and partially comply with the suggested measure.
Strategy T/LU-2: Infill Development, Redevelopment, and Repurposing	The project site is currently undeveloped, and bound by undeveloped land to the south, east, and north. As such, the proposed project would not be considered infill development or a redevelopment project. However, the project would involve the construction of residences on land that was formerly used as treatment ponds and, therefore, could be considered a repurposing project. As such, the project would generally comply with this suggested measure.
Strategy T/LU-3: Smart Growth in New Development	The Woodland CAP defines "smart growth" as including higher-density development, mixed use projects, and transit-oriented and bicycle and pedestrian friendly infrastructure. The proposed project would include a mix of land uses by including residences, medical offices, and other supportive services. In addition, the neighborhood would be considered higher-density due to the size of each unit, and the inclusion of the new transit stop would encourage the use of public transportation. Therefore, the proposed project would comply with this suggested measure.
Strategy T/LU-4: Reduced Motor Vehicle Trips	The proposed project includes construction of a bus turnout along East Beamer Street, as well as other public transit options for the residents. By encouraging the use of public transit, the need for the use of single passenger vehicles would be reduced. The project also includes plans for a sidewalk networks throughout the site, and bicycle lanes exist connecting the project site to central Woodland. As noted previously, the trip generation rate for the anticipated population would be lower than the trip generation rate for the current land use designation. As such, development of the site with the proposed project would result in lower VMT compared to development of the site with a

Table 8
Project Consistency with the Woodland Climate Action Plan

Reduction Measure	Consistency Discussion
	different allowable land use, such as a public office or a school. Therefore, the project would reduce VMT and comply with this suggested measure.
Strategy T/LU-5: Increased Mass Transit Use, Walking, and Bicycling	As noted above, the project would encourage public transit by providing a new bus turnout and installing sidewalks throughout the project site. In addition, bicycle lanes exist connecting the project site to central Woodland. As such, the project would include increased alternative transit opportunities and would comply with this suggested measure.
Strategy T/LU-6: Reduced Emissions from Vehicle Idling and Other Equipment	To achieve this measure, the Woodland CAP suggests that lawnmowers are replaced with electric models, and truck idling is reduced. The applicant has not committed to the use of electric landscaping and maintenance equipment, and specific information about truck idling is not available. As such, compliance with this measure is uncertain at this time.
Strategy T/LU-7: Increased Use of Alternative-Fuel Vehicles	Per the 2019 CALGreen Code, the project is required to provide the infrastructure necessary to facilitate installation of EV charging systems residential parking spaces. Therefore, compliance with the 2019 CALGreen Code would encourage the use of alternative-fuel vehicles, and the project would generally comply with this suggested measure.
Strategy UF-2: Increased Tree Planting	The proposed project would include landscaping features throughout the development that would consist of trees, shrubs, groundcover, and a community garden. Individual residences would also be landscaped with trees, shrubs, groundcover and some lawns. As such, the development would expand upon urban forestry and green infrastructure, and would comply with this measure.
Strategy W/W-1: Increased Water Conservation	The proposed project would be required to comply with the residential water efficiency regulations within CALGreen. In addition, landscaping within the project site would also be required to comply with all water efficiency measures within the CALGreen Code, including the MWELO or any similar regulations adopted by the City of Woodland. Thus, the proposed project would comply with this suggested measure.
Strategy W/W-2: Solid Waste Reduction and Waste Processing Improvements	Section 13.36.010 of the City's Municipal Code sets forth recycling requirements sufficient to meet State standards, including requiring all residents to make "reasonable efforts" to separate recyclable materials from all other solid waste. In addition, per the 2019 CALGreen Code, at least 65 percent of construction-related solid waste shall be diverted

Table 8
Project Consistency with the Woodland Climate Action Plan

Reduction Measure	Consistency Discussion
	from landfills. Thus, the proposed project would generally comply with this measure.

Source: City of Woodland Climate Action Plan, 2017.

As demonstrated in the tables above, the proposed project would comply with almost all measures included in the Yolo County CAP and the City of Woodland CAP. Therefore, the project is considered consistent with both the Yolo County CAP and the City of Woodland CAP. As such, the proposed project would not conflict with the applicable plans that were adopted for the purpose of reducing the emissions of greenhouse gasses, and the impact would be less-than-significant.

Conclusion

Based on the above, the proposed project would not conflict with the applicable SMAQMD thresholds for construction-related GHG emissions. In addition, the proposed project would comply with a majority of all applicable measures included within both the Yolo County and the City of Woodland Climate Action Plans. Thus, the project is not expected to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs. Therefore, a ***less-than-significant*** impact would occur.

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

Discussion

a. Residential developments, including supportive housing and shelters, are not typically associated with the routine transport, use, disposal, or generation of hazardous materials. Future residents of the facility may use common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount anticipated to be used on the site, routine use of such products would not represent a substantial risk to public health or the environment. Based on the above, the 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. The following discussion provides an analysis of potential hazards and hazardous materials associated with upset or accident conditions related to the proposed construction activities and existing on-site conditions.

Construction Activities

Construction activities associated with the proposed project could involve the use of various products such as concrete, paints, and adhesives. In addition, heavy-duty construction equipment operating on the project site would contain hydraulic fluid, diesel fuel, and other petroleum products. Small quantities of such potentially toxic substances would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and

Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Thus, construction of the proposed project would not 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.

Existing On-Site Hazardous Conditions

A Phase I ESA was prepared for the project site by Wallace Kuhl & Associates, and is included as Appendix F to this IS/MND.[21] The Phase I ESA included a site reconnaissance, visual inspection, several interviews, historical records review, preliminary vapor encroachment screening, and a review of the completed *ASTME 1527-13 User Questionnaire.*

Per an interview with the site owner, the site was previously developed with wastewater treatment ponds, and was used as such until 1988. In addition, the site has been used for cultivation of hay, storage of soils, and stormwater detention. The site reconnaissance was conducted on May 19, 2020. Per the reconnaissance, the study site was vacant, and an area of stockpiled soils with asphalt and concrete debris was identified in the south-central portion of the site. Soil piles were also observed on the western portion of the site. A review of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) website showed that the project site is located within the Crossroads Gas (ABD) field. The closest well, API 11320401, was located across CR 102 and was abandoned on April 22, 1982. Results of a Vapor Encroachment Screening (VES) conducted as part of the Phase I ESA indicate that vapor intrusion or vapor encroachment is unlikely at the project site. Per the Phase I ESA, above-ground storage tanks (ASTs), and underground storage tanks (USTs) were not identified on the site.

An excerpt from a 2008 appraisal revealed that the wastewater treatment facility and associated treatment ponds operated onsite for approximately 30 years, and sludge was removed from the former sewer ponds in 1996. Approximately 1.5 acres of land was previously used as a pistol range from 1940 through 1994, and spent bullets were reportedly present in the gun range area. The excerpt also noted that approximately 1,300 cubic yards of petroleum hydrocarbon impacted soil were placed on the south-central portion of the project site in 1993.

WKA prepared a Stockpile Soil and Sampling Analysis Report regarding soil samples collected from the south-central stockpile.[22] Five soil samples were collected for analysis of petroleum hydrocarbons, volatile organic compounds, organochloride pesticides, polychlorinated biphenyls, and the California Assessment Manual 17 listed metals. The only pollutant of concern that was identified is arsenic, concentrations of which fell within expected background levels for soils in the area. Petroleum hydrocarbons were also detected, but the concentration was below the USEPA screening level. As a result of the soil analysis, WKA concluded that hazardous compounds were not identified in the soils, but the potential for hazardous compounds to be present still exists.

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[21] Wallace Kuhl & Associates. *Phase I Environmental Site Assessment – East Beamer Housing Project Property Woodland, California WKA No. 12185.04P.* May 29, 2020.

[22] Wallace Kuhl & Associates. *Stockpile Soil sampling and Analysis Report – East Beamer Housing Project Woodland, CA WKA No. 12185.03P*. May 29, 2020.

The Phase I ESA concluded that the southwestern portion of the site was previously developed with several ponds associated with the City of Woodland wastewater treatment facility from at least 1968 to at least 1974. The ponds were backfilled with soils of unknown origin. As such, the potential exists for onsite soils to contain previously unknown hazardous materials. As noted in the Phase I ESA, the stockpiled soils would need to be removed and relocated prior to construction. In addition, the proposed structures may be located upon the backfilled ponds, or the backfilled ponds may be disturbed during cut and fill activities. Therefore, construction of the proposed project could create a hazard related to exposure of potential contaminants in the soils of unknown origin.

Conclusion

While the project site does not contain any known hazardous materials, the soils used to backfill former wastewater treatment ponds came from an unknown origin. Without soil sampling and testing of the previously imported soil, the 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)

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

IX-1. *Prior to initiation of construction activities associated with permanent structures on the project site, the project applicant shall complete an analysis of the soils used to backfill on-site ponds to determine whether substantial concentrations of organochloride pesticides or other soil contaminants are present above the applicable direct exposure Environmental Screening Levels (ESLs) set by the Regional Water Quality Control Board, the residential screening levels set by the Department of Toxic Substances Control's Human Health Risk Assessment Note 3, and/or the U.S. Environmental Protection Agency's Regional Screening Levels for Region 9. If contaminants are not detected above applicable ESLs/RSLs, then further mitigation is not required. If contaminants are detected above the applicable ESLs/RSLs, then the soils shall be remediated by off-hauling to a licensed landfill facility. Such remediation activities shall be performed by a licensed hazardous waste contractor (Class A) and contractor personnel that have completed 40-hour OSHA hazardous training. The results of soil sampling and analysis, as well as verification of proper remediation and disposal, shall be submitted to the City's Community Development Department for review and approval.*

c. The nearest school relative to the project site is the Ramon S. Tafoya Elementary School, located approximately one mile south of the site. In addition, as noted above, development of 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. Thus, ***no impact*** would result relating to the emission or handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d. According to the California Department of Toxic Substances Control's EnviroStor Database, 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,[23] and would not create a significant hazard to the public or the environment. Therefore, ***no impact*** would occur.

e. The proposed project is not located within an airport land use plan. The closest public airport to the project site is the Yolo County Airport, located approximately 9.7 miles southwest of the project site. As such, the proposed project site is not located within two miles of any public airports and does not fall within an airport land use plan area. Therefore, ***no impact*** related to a safety hazard for people residing or working in the project area would occur.

f. Construction of the proposed project would not result in any substantial modifications to the City's existing roadway system, and construction traffic would not interfere with evacuation or emergency response routes. During operation, the proposed project would provide adequate access for emergency vehicles and would not interfere with potential evacuation or response routes used by emergency response teams. As a result, the project would have a ***less-than-significant*** impact with respect to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

g. According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program, the project site is not located within a Very High Fire Hazard Severity Zone.[24] In addition, the majority of the land to the west, southwest, and south of the site has been urbanized; thus, the site not surrounded on all sides by wildlands. Therefore, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, and a ***less-than-significant*** impact would occur.

[23] California Department of Toxic Substances Control. *EnviroStor*. Available at: http://www.envirostor.dtsc.ca.gov. Accessed August 2019.

[24] California Department of Forestry and Fire Protection. *Yolo County, Draft Fire Hazard Severity Zones in LRA*. October 5, 2017.

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

Discussion

a,ci-ciii.

The proposed project's potential to result in water quality impacts and changes to drainage patterns during construction and operations is discussed in further detail separately below.

Construction

The proposed project would include ground-disturbing construction activities that would result in temporary topsoil exposure. During the early stages of construction activities, topsoil would be exposed due to grading and hauling fill to raise the elevation 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.

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. Given that the proposed project would disturb approximately eight acres of land, the proposed construction activities would be subject to applicable SWRCB regulations. Per the SWRCB Construction General Permit, the proposed project would be required to submit a Storm Water Pollution Prevention Plan (SWPPP) prepared by a Qualified SWPPP Developer (QSD). The SWPPP would require the use of soil erosion control techniques consistent with Yolo County's Storm Water Management Plan, which in turn would reduce the possibility of any significant soil erosion

from occurring.[25] Implementation of the SWPPP would ensure that erosion from construction activities would not result in the degradation of water quality in the project area.

Operations

Following completion of project buildout, the site would be largely covered with impervious surfaces and landscaping areas, and topsoil would no longer be exposed. As such, the potential for impacts to water quality would be reduced. 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.

The proposed project would be required to comply with post-construction Best Management Practices (BMPs) per Section 10-9.303 of the Yolo County Code. Such BMPs intend to control the volume, rate, and potential pollutant load of stormwater runoff. Compliance with ongoing BMPs would ensure that the proposed project would not substantially degrade surface water quality downstream as a result of project operations.

Conclusion

Construction and operations of the proposed project would not substantially degrade water quality standards nor significantly alter the existing drainage pattern of the site or area. As a result, the project would have a ***less-than-significant*** impact to water quality and drainage.

b,e. Following an Out of Agency Services Agreement, water supplies for the project site would be provided by the City of Woodland Utilities Division. Surface water from the Sacramento River is the primary source of drinking water, and groundwater is used as a backup to supplement surface water during times of high demand or reduced surface water availability. The City of Woodland is located in the Yolo Subbasin of the Sacramento Valley Groundwater Basin. The Yolo Subbasin was historically subject to overdraft, but construction of the Indian Valley Reservoir has provided substantial relief.

The Yolo Subbasin has a surface area of 256,000 acres and, therefore, the groundwater basin is recharged over a very large area. The impervious surfaces introduced at the project site would only remove approximately 8.5 acres of recharge area. Considering the entire surface area of the Yolo Subbasin, the proposed project would encompass a negligible portion of the recharge area and project implementation would not substantially affect groundwater recharge.

According to the City of Woodland's Groundwater Management Plan, 45,000 acre-feet per year of surface water could be diverted to the Cities of Woodland and Davis by the year 2040, which would meet almost all municipal and industrial demands within the two cities. Any additional demand would be met by groundwater sources, and the City would evaluate the need for new wells as needed. Future water demand is projected to be met by primarily surface water, and any excess demand would be supplemented by groundwater. As such, water demand resulting from the proposed project would be primarily met by surface water supply, and implementation of the project would not substantially decrease water supplies.

[25] Yolo County. *Storm Water Management*. Available at http://www.yolocounty.org/community-services/planning-public-works/public-works-division/storm-water-management. Accessed June 2017.

The Woodland General Plan designates the project site for industrial development. While the proposed GPA would change the type of development allowed on the project site, the General Plan EIR already anticipated and analyzed the construction of impervious surfaces and water demand at the project site. The proposed project would not result in increased use of groundwater supplies beyond was has already been anticipated for the site by the City and accounted for in the Groundwater Management Plan.

Based on the above, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the Yolo Subbasin. In addition, the project would not conflict with or obstruct implementation of a water quality control plan or the Woodland Groundwater Management Plan. Thus, a ***less-than-significant*** impact would occur.

civ. According to the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer Map for the project site, the project site is located within a 100-year floodplain.[26] Because the project site is located within a designated flood risk area, the proposed project has been designed to minimize potential effects related to flooding. For example, all residential structures would be built upon 12-inch concrete piers on compacted fill to reach an elevation of 45 feet, and the other structures would be placed on compacted fill to reach an elevation of 43 feet.

Placing fill material on the site could create an obstruction to overland flow within the floodplain, which could cause increased maximum flood elevations in the project vicinity. A Technical Memorandum was prepared to assess the change in maximum water surface elevation following the proposed cut and fill project. The Technical Memorandum concluded that the fill material would result in an average increase of 0.1 to 0.2 inches in maximum water surface elevation in the project area, and the cut and fill activities would not alter the overall base flood elevation.

FEMA regulation 44 CFR 60.3-c-10 states: "[…] no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community." Based on the conclusion presented in the Technical Memorandum, the proposed development would not increase the water surface elevation of the base flood by more than one foot at any point within the community, and the proposed project would comply with the FEMA regulation.

In conclusion, the project site is classified as a Special Flood Hazard Area and located within a 100-year or 500-year floodplain. Thus, the proposed project would place people and structures within a designated floodplain, and would require soil cut and fill to raise the site's ground elevation. Without proper cut and fill design, a ***potentially significant*** impact related to impeding or redirecting flood flows could occur.

[26] Federal Emergency Management Agency. *Flood Insurance Rate Map 06013C0355G.* Effective March 21, 2007.

Mitigation Measure(s)

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

X-1 *Prior to the submittal of improvement plans, the applicant shall include on the plans that the ground floor elevation of all structures shall be constructed one foot above the base flood elevation (BFE). Such plans shall be submitted to the City Engineer for review and approval.*

d. Potential hazards related to development within a flood zone are discussed under question 'civ' above. Tsunamis are defined as sea waves created by undersea fault movement or other underwater disturbance that displace a large volume of water, resulting in flooding hazards to coastal development. The project site is not located in proximity to a coastline and would not be potentially affected by flooding risks associated with tsunamis. A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir. Seiches do not pose a risk to the proposed project, as the project site is not located adjacent to a large closed body of water. Therefore, implementation of the proposed project would not result in the release of pollutants due to inundation from a flood, tsunami, or seiche, and a ***less-than-significant*** impact would occur.

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

Discussion

a. A project risks dividing an established community if the project would introduce infrastructure or alter land uses so as to change the land use conditions in the surrounding community, or isolate an existing land use. Currently, the project site is primarily undeveloped and surrounded by vacant agricultural and industrial land. Because the project is surrounded by mostly open land, the project would not isolate an existing land use. As such, the proposed project would not physically divide an established community, and a ***less-than-significant*** impact would occur.

b. The project site is within an unincorporated portion of Yolo County, just outside Woodland City limits. As such, the site is designated IN per the City of Woodland's General Plan and is designated PQ per the Yolo County General Plan. The County of Yolo has zoned the project site PQP.

As part of the proposed project, the City of Woodland would be required to approve a General Plan Amendment to allow shelters within land designated IN. In addition, Yolo County would be responsible for the approval of a General Plan Amendment to redesignate the site from PQ to CG and a Rezone from PQP to C-G. The PQ and PQP zones currently allow land uses including public offices, civic uses, schools, museums, fraternal organizations, and others.[27] As such, portions of the proposed project, such as the proposed community center, would generally comply with the current designation. However, the CG and C-G designation is intended to include personal services, professional offices, restaurants, gas and service stations, hotels and motels, and other similar uses.[28] As such, the CG land use designation and C-G zoning would be better suited to accommodate the proposed land uses, including the proposed treatment facility and neighborhood. Upon approval of the aforementioned entitlements, the project would comply with all zoning and land use regulations, and the project would not be expected to conflict with any applicable land use plan.

As discussed throughout this Initial Study, the proposed project would not result in any significant environmental effects that cannot be mitigated to a less-than-significant level by the mitigation measures provided herein. In addition, the proposed project would not conflict with City or County policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, including, but not limited to, the City's and County's noise standards, applicable stormwater regulations, and water quality standards. Therefore, the proposed project would not conflict with any land use plan, policy, or

[27] County of Yolo. *Yolo County Community Services Department Zoning Code (Title 8 of the Yolo County Code)*. July 2014.

[28] *Ibid*.

regulation adopted for the purpose of avoiding or mitigating an environmental impact, and a ***less-than-significant*** impact would occur.

XII. MINERAL RESOURCES. *Would the project:*		Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	✖	☐
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	✖	☐

Discussion

a,b. The State designates areas containing valuable deposits of minerals as Mineral Resource Zones; the project site is not located in the vicinity of any State-designated Mineral Resource Zones.[29]

Yolo County has two primary mineral resources: mined aggregate and natural gas. Several known natural gas fields exist within the Yolo County Planning Area, including the Crossroads Oil/Gas Field beneath the project site.[30] However, according to the Division of Oil, Gas, and Geothermal Resources (DOGGR) Geographic Information System (GIS) Well Finder, active natural gas wells do not exist within the vicinity of the project site. However, several plugged wells exist near the site.[31] The presence of plugged wells indicate that the project area has previous been mined for natural gas. However, the natural gas field extends outside of the project site, and natural gas could potentially be mined from a permitted distance. Thus, construction of the proposed project would not 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. Further, the Crossroads Oil/Gas Field is not considered a locally-important mineral resource recovery site per the local general plan or other land use plan, and, therefore, a ***less-than-significant*** impact to mineral resources would occur.

[29] Yolo County. *County of Yolo 2030 Countywide General Plan* [pg. CO-43]. November 10, 2009.

[30] City of Woodland. *General Plan Update 2035* [pg. 7-29]. May 16, 2017.

[31] Division of Oil, Gas, and Geothermal Resources. *Well Finder DOGGR GIS*. Available at: https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-121.69618/38.67745/12 . Accessed November 22, 2019.

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

Discussion

a. The proposed project involves the construction of approximately 100 residential units, a shelter, substance abuse treatment facility, and associated improvements on approximately 8.5 acres of vacant land. Sensitive receptors to noise include residential areas, schools, churches, nursing homes/senior housing, hospitals, libraries, and childcare facilities. The nearest sensitive receptors would be the residences located over 4,000 feet south of the project site.

Construction of the proposed project would result in temporarily increased noise levels. Construction noise from site development would include mechanical equipment such as earthmovers, dump trucks, and similar equipment during grading, the delivery of construction materials, construction of foundations, framing, roofing, and similar operations. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. However, construction activity would occur over a relatively short period of time, and is anticipated to occur during normal daytime hours. Furthermore, the project site is separated from the nearest sensitive receptor by agricultural land and Interstate 5 (I-5). Noise intensity reduces with distance, thus, the distance between the project site and the nearest residence would attenuate the construction related noise prior to reaching the residences.

Based on the Federal Highway Administration's Construction Noise Handbook, activities involved in typical construction would generate maximum noise levels up to 88 decibel (dB) at a distance of 50 feet.[32] The nearest residence is approximately 4,000 feet away from the project site. Typically, a three-decibel reduction in sound intensity occurs with every doubling of distance from a source. Therefore, the construction noise would be reduced to less than 50 dB at the nearest residence. As such, construction of the proposed project would not subject nearby residents to excessive noise, and the temporary and intermittent nature of construction activity would not permanently alter ambient noise levels in the project area.

Operations of residential developments are not typically associated with the production of substantial noise. Potential sources of noise would be from normal maintenance activities and use of vehicles, but this would create little noise. As such, operations of the proposed

[32] United States Environmental Protection Agency. *Legal Compilation on Noise* [Volume 1, pg 2-104]. 1973.

project are not anticipated to substantially contribute to ambient noise levels within the vicinity.

Construction of all components of the proposed facility is not expected to generate noise in excess of local standards, and noise generated by operations of the proposed project would not be audible at the nearby industrial facilities. A substantial permanent increase in noise levels in the project vicinity would not occur, and impacts would be considered ***less-than-significant.***

b. Some groundborne noise and vibration could occur during construction of the proposed project. However, vibration would be limited because most structures would be built upon compacted fill or augured piles. The nearest structure is a Target Warehouse, which is located across the East Beamer Street/CR 102 intersection, approximately 500 feet away. The next closest facility is the Woodland Biomass Power facility, located over 2,000 feet from the construction area. Groundborne noise and vibration dissipate with distance, and the nearby facilities are not expected to experience a perceptible increase in groundborne noise or exposure to groundborne vibration due to project implementation. Furthermore, the construction process would be relatively short-term compared to the lifetime of the proposed project. Operations of the proposed neighborhood and associated buildings are not expected to result in groundborne noise or vibrations. Therefore, the proposed project would not cause excessive groundborne vibration or groundborne noise levels, and the impact is expected to be ***less-than-significant***.

c. The proposed project is not located in the vicinity of any public or private airports. Medlock Field is the closest private airport, located 4.7 miles from the project site, and the Yolo County Airport is the closest public airport, located approximately ten miles from the project site. As such, the proposed project site is not located within two miles of any public airports or private airstrips and does not fall within an airport land use plan area. Therefore, the project would not expose people working or residing in the project area to excessive noise produced by an airport and a ***less-than-significant*** impact would occur.

XIV. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	✖	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✖

Discussion

a. The proposed project would involve the development of approximately 100 permanent supportive housing units, a shelter with 100 beds, and a residential substance abuse treatment facility with 54 beds. The people populating the proposed neighborhood would be previously homeless and would likely reside in the Woodland area. Thus, the project would not contribute to population growth but rather help relocate homeless individuals in the area. While the proposed project would develop new homes, the homes would be for Yolo County citizens currently in need of housing. Therefore, development of the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly, and a ***less-than-significant*** impact would occur.

b. The project site is currently open land and, thus, would not displace existing people or housing, necessitating the construction of replacement housing elsewhere, and ***no impact*** would occur.

XV. PUBLIC SERVICES.

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

Discussion

a,b. The Springlake Fire Protection District has agreements with City of Woodland Fire Department and the City of Davis Fire Department to provide fire protection services throughout the District. The project site is located within Fire Service Area A of the Springlake Fire Protection District, which is serviced by the City of Woodland Fire Department. The Woodland Fire Department provides fire protection and prevention services by responding to emergencies, conducting educational outreach, and planning for emergency service needs. Three fire stations are located in the City. Station #3, at 1550 Springlake Court, is the closest to the project site at 1.2 mile away. The Woodland General Plan proposes a fourth fire station to serve the Spring Lake Specific Plan area. Per the Yolo County General Plan Policy PF-5.9, the County requires receipt of a will-serve letter from the appropriate fire district confirming the ability to provide fire protection services to the project. Section 3-16.06 of the County Code mandates that prior to the issuance of any building permit, the applicant shall pay the appropriate fees as prescribed by the Fire District. As such, the project applicant would be required to provide the will-serve letter from the Springlake Fire Protection District and pay the associated service fee to reduce the impacts associated with the increase in fire service demand resulting from the proposed project. To facilitate on-site fire protection, five fire hydrants and several fire sprinklers would be constructed throughout the site as part of the proposed project. Based on the above, the planned expansion of the fire department, appropriate fee payment, and required fire prevention measures would be sufficient to maintain acceptable service ratios and response times following construction of the proposed project without the need for construction of new, previously unplanned fire service facilities.

Law enforcement services in unincorporated portions of Yolo County are provided by the County Sheriff-Coroner Department. The department has a staff of 276 full time employees, 95 of which are full-time sworn officers, and is located at 140 Tony Diaz Drive in Woodland. Policy PF-4.3 of the Yolo County General Plan requires that the Sheriff's Department maintain a minimum ratio of 1.75 officers per 1,000 service population.[33] According to 2016 demographic data, approximately 28,500 residents lived in Unincorporated Yolo County.[34] Assuming the 95 full-time sworn officers were serving the 28,500 residents, a ratio of 3.33 officers per 1,000 residents is well above the mandated requirement. As such, the minor increase in demand for law enforcement as a result of

[33] County of Yolo. *County of Yolo 2030 General Plan*. November 10, 2009.

[34] County of Yolo. *Yolo County Unincorporated Area Community Profile Version 1.0*. December 2018.

the proposed project would not require additional staff members. Further, the residences would be located within a gated community, which would reduce some potential for criminal activity and associated Sheriff presence. It should be noted that the Woodland Police Department could also respond to an emergency if needed. Therefore, new police facilities would not be required as a result of the proposed project.

Because the demand for fire and police protection services is not likely to significantly increase with implementation of the proposed project, current fire and police protection services would be adequate to serve the proposed project. Therefore, a ***less-than-significant*** impact *associated with the provision of new or physically altered fire and police facilities the construction of which could cause significant environmental impacts,* would occur.

c. The project site is within the Woodland Joint Unified School District, which offers public preschool, K-8, high school, and adult education programs. The expected population of the proposed project would be formerly homeless adults or people with mental health or substance abuse problems. As such, the standard student generation rate of 0.5 student per dwelling unit may not apply to the neighborhood. Nonetheless, according to Government Code Section 65995 et. seq. and Education Code Section 17620 et. seq, payment of applicable development fees would be sufficient in reducing the impacts associated with a potential increase in students from the project. Therefore, the proposed project would result in a ***less-than-significant*** impact regarding an increase in demand for schools, the construction of which could cause significant environmental impacts.

d,e. The proposed project would result in the development of a neighborhood of approximately 100 residential units, a shelter, and substance abuse treatment facility. The proposed structures would introduce a maximum of 250 residents to the site. Recreational facilities, such as a community center, public garden, and two gathering spaces, are included in the design plan. As such, the proposed project includes recreational facilities, and future residents would have access to other parks and public facilities throughout the City and County. However, the project may be subject to Yolo County parkland impact fees under Action Item PF-A21.[35] Contingent upon payment of the appropriate impact fees, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered parks and other public facilities, the construction of which could cause significant environmental effects. Thus, the impact would be ***less-than-significant***

[35] County of Yolo. *County of Yolo 2030 Countywide General Plan* [pg PF-16]. November 10, 2009.

XVI. RECREATION. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Discussion

a, b. As discussed in questions 'd' and 'e' of Section XV, Public Services, of this IS/MND, the proposed project would include the construction of recreational facilities, including a community center, community garden, and gathering areas. Because the project would include on-site recreation areas, implementation of the proposed project is not expected to result in the increased use and associated deterioration of other local recreational facilities. Under Action Item PF-A21, the project would be subject to Yolo County parkland impact fees.[36] Assuming payment of the required park impact fees to mitigate any adverse effects, the impact of the increased population on the parkland ratio would be considered ***less-than-significant***.

[36] County of Yolo. *County of Yolo 2030 Countywide General Plan* [pg PF-16]. November 10, 2009.

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

Discussion

a. Public transit stops do not currently exist in the vicinity of the project site. A bike lane does exist along East Beamer Street. The following discussion includes more detail regarding each phase of the proposed project and the associated potential impacts to transportation.

Construction

During construction, an increase in traffic along East Beamer Street and CR 102 would occur due to trucks transporting materials to the project site and construction employees commuting to the site. However, construction of the proposed facility would be relatively short-term compared to the lifetime of the proposed project, as construction is anticipated to occur over approximately two years. The total number of vehicle trips during construction would be relatively few, and local roadways have adequate capacity to support the small increase in traffic. Due to the small project size and temporary nature of construction, the minor increase in traffic would not cause a substantial impact to transportation infrastructure.

Operations

The proposed project includes the construction of an access road and YoloBus turnout off East Beamer Street, paved sidewalks, and internal roads connecting the proposed structures. The internal roads would not impact the surrounding traffic infrastructure, and the bus turnout would encourage the use of public transit. The proposed plans comply with Yolo County General Plan Policy CC-2.16, which requires future communities to promote walking, bicycling, and public transit. Similarly, Policy CI-2.3 requires that public transit be available as a viable and attractive alternative to the use of single-occupant vehicles. The project would maintain the existing bicycle lanes, and the project operators would provide shuttles to other bus stops. Additionally, Yolo County Medi-Cal would provide transportation for medical appointments. The availability of public transit, ridesharing options, bicycle lanes, and sidewalks would contribute to a decreased demand for individual vehicle use. As a result, a substantial increase in vehicular traffic is not anticipated during operations of the proposed project. Lastly, although residential land uses are often associated with increased traffic, the target population for the proposed project would be formerly homeless individuals and are expected to have a relatively low single-occupant motor vehicle use ratio.

Vehicle trips would be generated during project operations by employees commuting to the site. However, such employees would have access to the aforementioned public transit options, and parking would exist on-site to accommodate employee vehicles. In addition, the number of trips generated by employees would be nominal compared to the

total amount of traffic in the City, and the roadways in the vicinity are sufficient to support the minor increase in traffic.

Based on the above, operations of the proposed project are not anticipated to conflict with local transportation systems.

Conclusion

Based on the planned improvements to public transportation infrastructure and the minimal traffic associated with construction and operations of the proposed project, the 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.

b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of vehicle miles traveled (VMT) attributable to a project is the most appropriate measure of transportation impacts. While a qualitative discussion of VMT has been provided below, the provisions of Section 15064.3 apply only prospectively; determination of impacts based on VMT is not required Statewide until July 1, 2020.

Per Section 15064.3(3), a lead agency may 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.

As discussed in question 'a', vehicle trips associated with construction would include transporting materials to the project site along with employee commutes. Construction of the proposed facility would be relatively short-term compared to the lifetime of the proposed development. Due to the temporary nature of construction, the small increase in VMT would not cause a substantial impact to transportation.

VMT during operations would increase due to residents of the neighborhood traveling into central Woodland, and people or employees visiting the project site. Site plans include construction of a new bus turnout along East Beamer Street, which would make public transit easily accessible. Several ridesharing options (Uber, Lyft, VIA) and shuttle programs (private shuttles, transport through Yolo County Medi-Cal) would be available as mobility resources. The accessibility of public transit would decrease operational VMT. In addition, bike lanes exist connecting the project site to downtown Woodland. Based on the intended population, the rate of car ownership is expected to be low, and thus, the use of single-passenger vehicles and associated VMT would be low.

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

c. The proposed project would not include design features that would affect traffic safety, nor would it cause incompatible uses to be present on local roads. Construction of new public

roads is not proposed as part of the project, and a significant increase in traffic is not projected during project construction or operations. Significant adverse impacts related to roadway design features or incompatible uses would not result from implementation of the proposed solar project, and ***less-than-significant*** would occur.

d. During project construction, public roads in the vicinity would remain open and available for use by emergency vehicles and other traffic. The project site would be accessible by way of the entrance road from East Beamer Street, and the road would be wide enough to accommodate emergency vehicles. The proposed project would construct internal circulation roads consistent with Title 19 Section 3.05 of the California Code of Regulations, which mandates right of way lanes not be less than 20 feet in width and fire/emergency access lanes be a minimum of 20 feet wide. Per project site plans, lanes would be built out 20 feet in width. Therefore, the proposed project would not result in inadequate emergency access to the project area nor result in any road closures. The proposed project would include on-site roads of appropriate size to accommodate emergency vehicles, and a ***less-than-significant*** impact to emergency access would occur.

XVIII. TRIBAL CULTURAL RESOURCES. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	☐	✖	☐	☐
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.	☐	✖	☐	☐

Discussion

a,b. The search of the NAHC Sacred Lands File indicated negative results for sacred sites within the project area and/or immediate vicinity. The project site was previously used for water treatment ponds. This former land use required ground-disturbing activities in order to create the ponds. Because the land is previously disturbed, the likelihood of resources being found on-site is low.

In compliance with AB 52 (Public Resources Code Section 21080.3.1), a project notification letter was distributed to the Cortina Rancheria – Kletsel Dehe Band of Wintun Indians and Yocha Dehe Wintun Nation. The letter was distributed on March 6, 2020, and responses have not yet been received by the City.

In addition, Tom Origer & Associates contacted several local tribes, including the Cortina Rancheria – Kletsel Dehe Band of Wintun Indians, United Auburn Indian Community of the Auburn Rancheria, and Yocha Dehe Wintun Nation, with a consultation invitation.

Based on the known historical use as a wastewater treatment facility at the project site, and the lack of identified cultural resources at the site, known Tribal Cultural Resources do not exist within the site. Nevertheless, the possibility exists that construction 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 ground-disturbing activities.

Based on the above, a ***potentially significant*** impact to Tribal Cultural Resources could occur.

Mitigation Measure(s)

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

XVIII-1 Implement Mitigation Measures V-1 and V-2.

XIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	✖	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	✖	☐
c. Result in a determination by the wastewater treatment provider 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?	☐	☐	✖	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	✖	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	✖	☐

Discussion

a-c. Following approval of an Out of Agency Services Agreement, the City of Woodland Utilities Division would provide water and sewer services to the project site. The project design includes plans to manage stormwater, through inclusion of a grassy drainage swale that would direct runoff through a trash removal structure and then into a stormwater basin north of the site. Following construction of the proposed project, electricity would be provided by VCE, through existing PG&E infrastructure.

Prior to 2016, the City of Woodland relied on groundwater for all drinking water supply. In 2009, the Cities of Woodland and Davis partnered to form the Woodland-Davis Clean Water Agency to develop a new water supply from the Sacramento River. Currently, approximately 13 million gallons of water are diverted from the Sacramento River to Woodland each day.[37] According to the California Water Boards, statewide average water use was 57.5 residential gallons per capita per day in February 2017.[38] It should be noted that this estimate is likely conservative, as each proposed unit would be smaller than the average residence. However, if the estimate is used to predict water demand, approximately 14,375 gallons of water per capita per day would be required to accommodate the proposed 250 residents at the East Beamer Street Neighborhood Campus. Compared to the 13 million gallons diverted to Woodland per day, the extra demand would make up less than one percent of the City's total water demand. The City plans to develop several Aquifer Storage and Recovery wells to balance winter water supply with summer demand, and store treated surface water in preparation of future

[37] Woodland-Davis Clean Water Agency. *Our Water: Water for Woodland, Davis and UC Davis*. Available at: https://www.wdcwa.com/our-water-1. Accessed November 22, 2019.

[38] California Water Boards. *Media Release: Statewide Water Savings Exceed 25 Percent in February*. April 4, 2017.

droughts.[39] Thus, water supplies would be available to serve the proposed project in the foreseeable future.

Additionally, the Woodland General Plan anticipated development of the project site. Therefore, the increase in water demand at the project site has been previously anticipated and analyzed in the General Plan EIR. The project would connect to existing water conveyance lines, and there would not be a need for major expansion of facilities or water utility infrastructure.

The City's Water Pollution Control Facility (WPCF), located east of CR 102 and Gibson Road, is responsible for the treatment and disposal of the City's municipal wastewater.[40] Under the facility's existing National Pollutant Discharge Elimination System permit, the plant is authorized to discharge up to 10.4 million gallons per day (MGD). Current flows, as of June 2016, are approximately 5 MGD. As a general rule of thumb, 90 percent of potable water becomes wastewater. As such, the proposed project would increase wastewater treatment demand by approximately 0.0129 MGD (0.014375 MGD x 0.9 water-to-wastewater ratio = 0.012938 MGD), which is a negligible increase compared to the permitted capacity. Therefore, addition of wastewater from the proposed project would not overwhelm the wastewater treatment facility or require expansion or construction of new facilities. The project would include connection of a new wastewater line within the project site to the City's existing sewage line in East Beamer Street.

As discussed above, the Woodland General Plan anticipated development of the project site. As such, the increase in wastewater treatment demand has been previously anticipated and analyzed in the General Plan EIR. Thus, the increased demand on wastewater treatment would be less than significant, and the wastewater treatment provider would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Electricity, natural gas, and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. Considering the existing infrastructure, the proposed project would not require the relocation or construction of new or expanded facilities. Therefore, 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,e. Solid waste, recyclable materials, and compostable material collection within Yolo County are directed to the Yolo County Central Landfill. The Yolo County Central Landfill is a Class III Solid waste landfill with an estimated closure date of January 1, 2081. Policy PF-9.2 of the Yolo County General Plan requires that new developments ensure adequate landfill space for existing and planned uses.[41] According to the California Department of Resources Recycling and Recovery (CalRecycle), the Yolo County Central Landfill has a remaining capacity of 35,171,142 cubic yards out of a total permitted capacity of

[39] City of Woodland. *General Plan 2035 Update* [pg 5-37]. May 16, 2017.

[40] City of Woodland. *2015 Urban Water Management Plan* [pg 6-8]. June 2016.

[41] Yolo County. *County of Yolo 2030 Countywide General Plan* [pg PF-34]. November 10, 2009.

49,035,200, or 71 percent remaining capacity.[42] Due to the substantial amount of available capacity remaining at the Yolo County Central Landfill, sufficient capacity would be available to accommodate the project's solid waste disposal needs and the project would comply with General Plan Policy PF-9.2. Therefore, a ***less-than-significant*** impact related to solid waste would occur as a result of the proposed project.

[42] California Department of Resources Recycling and Recovery (CalRecycle). *SWIS Facility Detail, Yolo County Central Landfill (57-AA-0001)*. Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/. Accessed November 20, 2019.

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

Discussion

a-d. Per the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program, the project site is not located within a Very High Fire Hazard Severity Zone.[43] Thus, the proposed project would not result in substantial risk or hazards related to wildfires, and a ***less-than-significant*** impact would occur.

[43] California Department of Forestry and Fire Protection. *Yolo County, Draft Fire Hazard Severity Zones in LRA*. October 5, 2017.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to 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?	☐	☐	✖	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	✖	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	✖	☐

Discussion

a. As discussed in Section IV, Biological Resources, of this IS/MND, a limited potential exists for several special status species (e.g. western burrowing owl, Swainson's hawk, tricolored blackbird, etc.) to occur on-site. However, Mitigation Measures IV-1 through IV-6 would ensure that any impacts related to such species would be reduced to a less-than-significant level. Implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic or prehistoric resources, but Mitigation Measures V-1 and V-2 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. The proposed project, in conjunction with other developments throughout Yolo County, 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. Following approval of a General Plan Amendment and Zoning Text Amendment, development of the proposed project would be consistent with the General Plan and associated cumulative impacts have been analyzed within the General Plan EIR.

All cumulative impacts related to air quality and noise are either less than significant after mitigation or less than significant and do not require mitigation. Given the scope of the

project, the incremental effects of this project are not considerable relative to the effects of past, current, and probably future projects. With the implementation of the mitigation measures, the proposed project would not result in cumulatively significant impacts on these areas.

Therefore, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in Yolo County, and the project's incremental contribution to cumulative impacts would be ***less than significant***.

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, in addition to the mitigation measures included herein. Furthermore, as discussed in Section III, Air Quality, Section IX, Hazards and Hazardous Materials, and Section XIII, Noise, of this IS/MND, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, hazardous materials, traffic, and noise. Therefore, the proposed project's environmental impact on human beings would be ***less than significant***.

Appendix A

CalEEMod Results

East Beamer - Permanent Facilities

Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	100.00	Dwelling Unit	2.75	23,040.00	100
Congregate Care (Assisted Living)	154.00	Dwelling Unit	2.07	36,080.00	154

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	6.8	**Precipitation Freq (Days)**	55
Climate Zone	2			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	269.5	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Annual

Project Characteristics - CO2 intensity factor updated per PG&Es RPS projections.

Land Use - Square footage/acreage has been adjusted per the preliminary site plan provided by the project applicant.

Construction Phase - Total days required for architectural coating was updated to reflect the coating taking place concurrently with building construction.

Vehicle Trips - Community Center (Arena) trip rates are set to zero because applicant intends that neighborhood residents will access that facility on foot.

Road Dust - All roads to and from the project site would be paved.

Energy Use - Title 24 Energy Intensities are adjusted to comply with the 2019 CBSC (which require a 53% reduction for residences and 30% for commercial)

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Grading - Total acres graded edited to incorporate the cut area.

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	PhaseEndDate	8/26/2021	8/17/2021
tblConstructionPhase	PhaseEndDate	7/7/2021	8/2/2021
tblConstructionPhase	PhaseEndDate	8/2/2021	9/14/2020
tblConstructionPhase	PhaseStartDate	8/3/2021	9/30/2020
tblConstructionPhase	PhaseStartDate	8/20/2020	9/15/2020
tblConstructionPhase	PhaseStartDate	7/8/2021	8/20/2020
tblEnergyUse	T24E	511.12	240.23
tblEnergyUse	T24E	460.92	322.64
tblEnergyUse	T24NG	9,411.72	4,423.51
tblEnergyUse	T24NG	7,061.10	4,942.77
tblGrading	AcresOfGrading	4.00	8.71
tblLandUse	LandUseSquareFeet	100,000.00	23,040.00
tblLandUse	LandUseSquareFeet	154,000.00	36,080.00
tblLandUse	LotAcreage	6.25	2.75
tblLandUse	LotAcreage	9.63	2.07
tblLandUse	Population	286.00	100.00
tblLandUse	Population	440.00	154.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	94	100

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					
2020	0.2743	1.2855	1.2642	2.8400e-003	10.6269	0.0650	10.6920	1.1083	0.0611	1.1694	0.0000	252.5930	252.5930	0.0373	0.0000	253.5243
2021	0.5057	1.7382	1.9716	4.7800e-003	20.6157	0.0824	20.6980	2.0898	0.0779	2.1677	0.0000	425.0295	425.0295	0.0508	0.0000	426.3000
Maximum	**0.5057**	**1.7382**	**1.9716**	**4.7800e-003**	**20.6157**	**0.0824**	**20.6980**	**2.0898**	**0.0779**	**2.1677**	**0.0000**	**425.0295**	**425.0295**	**0.0508**	**0.0000**	**426.3000**

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					
2020	0.2743	1.2855	1.2642	2.8400e-003	0.1727	0.0650	0.2377	0.0651	0.0611	0.1262	0.0000	252.5928	252.5928	0.0373	0.0000	253.5242
2021	0.5057	1.7382	1.9716	4.7800e-003	0.1930	0.0824	0.2753	0.0519	0.0779	0.1298	0.0000	425.0292	425.0292	0.0508	0.0000	426.2998
Maximum	**0.5057**	**1.7382**	**1.9716**	**4.7800e-003**	**0.1930**	**0.0824**	**0.2753**	**0.0651**	**0.0779**	**0.1298**	**0.0000**	**425.0292**	**425.0292**	**0.0508**	**0.0000**	**426.2998**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**98.83**	**0.00**	**98.37**	**96.34**	**0.00**	**92.33**	**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	8-1-2020	10-31-2020	0.8688	0.8688
2	11-1-2020	1-31-2021	1.0211	1.0211
3	2-1-2021	4-30-2021	0.9298	0.9298
4	5-1-2021	7-31-2021	0.9566	0.9566
5	8-1-2021	9-30-2021	0.0489	0.0489
		Highest	1.0211	1.0211

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	23.9269	0.4381	31.0682	0.0528		4.1024	4.1024		4.1024	4.1024	390.0020	113.1154	503.1174	0.3675	0.0296	521.1215
Energy	0.0102	0.0869	0.0370	5.5000e-004		7.0300e-003	7.0300e-003		7.0300e-003	7.0300e-003	0.0000	229.8002	229.8002	0.0158	4.7200e-003	231.6026
Mobile	0.3882	2.9232	4.6134	0.0205	1.5082	0.0172	1.5253	0.4060	0.0161	0.4221	0.0000	1,891.3806	1,891.3806	0.0845	0.0000	1,893.4925
Waste						0.0000	0.0000		0.0000	0.0000	37.8639	0.0000	37.8639	2.2377	0.0000	93.8062
Water						0.0000	0.0000		0.0000	0.0000	5.2503	15.4104	20.6607	0.5409	0.0131	38.0801
Total	**24.3253**	**3.4482**	**35.7186**	**0.0738**	**1.5082**	**4.1266**	**5.6347**	**0.4060**	**4.1255**	**4.5315**	**433.1162**	**2,249.7066**	**2,682.8227**	**3.2464**	**0.0474**	**2,778.1030**

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	0.3249	0.0218	1.8880	1.0000e-004		0.0104	0.0104		0.0104	0.0104	0.0000	3.0807	3.0807	2.9700e-003	0.0000	3.1550
Energy	0.0102	0.0869	0.0370	5.5000e-004		7.0300e-003	7.0300e-003		7.0300e-003	7.0300e-003	0.0000	229.8002	229.8002	0.0158	4.7200e-003	231.6026
Mobile	0.3769	2.8299	4.3912	0.0194	1.4185	0.0162	1.4347	0.3819	0.0153	0.3971	0.0000	1,788.2293	1,788.2293	0.0814	0.0000	1,790.2642
Waste						0.0000	0.0000		0.0000	0.0000	37.8639	0.0000	37.8639	2.2377	0.0000	93.8062
Water						0.0000	0.0000		0.0000	0.0000	5.2503	15.4104	20.6607	0.5409	0.0131	38.0801
Total	**0.7119**	**2.9386**	**6.3162**	**0.0200**	**1.4185**	**0.0337**	**1.4521**	**0.3819**	**0.0327**	**0.4146**	**43.1142**	**2,036.5206**	**2,079.6348**	**2.8788**	**0.0178**	**2,156.9082**

	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	N20	CO2e
Percent Reduction	**97.07**	**14.78**	**82.32**	**72.90**	**5.95**	**99.18**	**74.23**	**5.95**	**99.21**	**90.85**	**90.05**	**9.48**	**22.48**	**11.32**	**62.44**	**22.36**

3.0 Construction Detail

Construction Phase

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/1/2020	8/7/2020	5	5	
2	Grading	Grading	8/8/2020	8/19/2020	5	8	
3	Building Construction	Building Construction	9/15/2020	8/2/2021	5	230	
4	Paving	Paving	8/20/2020	9/14/2020	5	18	
5	Architectural Coating	Architectural Coating	9/30/2020	8/17/2021	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.71

Acres of Paving: 0

Residential Indoor: 119,718; Residential Outdoor: 39,906; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Annual

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

Trips and VMT

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
Site Preparation	7	18.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	183.00	27.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
Total	**0.0102**	**0.1060**	**0.0538**	**1.0000e-004**	**0.0452**	**5.4900e-003**	**0.0507**	**0.0248**	**5.0500e-003**	**0.0299**	**0.0000**	**8.3577**	**8.3577**	**2.7000e-003**	**0.0000**	**8.4253**

3.2 Site Preparation - 2020

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	2.1000e-004	1.5000e-004	1.5100e-003	0.0000	0.0511	0.0000	0.0511	5.1800e-003	0.0000	5.1800e-003	0.0000	0.4482	0.4482	1.0000e-005	0.0000	0.4485
Total	**2.1000e-004**	**1.5000e-004**	**1.5100e-003**	**0.0000**	**0.0511**	**0.0000**	**0.0511**	**5.1800e-003**	**0.0000**	**5.1800e-003**	**0.0000**	**0.4482**	**0.4482**	**1.0000e-005**	**0.0000**	**0.4485**

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	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252
Total	**0.0102**	**0.1060**	**0.0538**	**1.0000e-004**	**0.0452**	**5.4900e-003**	**0.0507**	**0.0248**	**5.0500e-003**	**0.0299**	**0.0000**	**8.3577**	**8.3577**	**2.7000e-003**	**0.0000**	**8.4252**

3.2 Site Preparation - 2020

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	2.1000e-004	1.5000e-004	1.5100e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4482	0.4482	1.0000e-005	0.0000	0.4485
Total	**2.1000e-004**	**1.5000e-004**	**1.5100e-003**	**0.0000**	**4.7000e-004**	**0.0000**	**4.7000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4482**	**0.4482**	**1.0000e-005**	**0.0000**	**0.4485**

3.3 Grading - 2020

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					0.0287	0.0000	0.0287	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**9.7200e-003**	**0.1055**	**0.0642**	**1.2000e-004**	**0.0287**	**5.0900e-003**	**0.0338**	**0.0137**	**4.6900e-003**	**0.0184**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.3 Grading - 2020

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	2.8000e-004	2.0000e-004	2.0100e-003	1.0000e-005	0.0681	0.0000	0.0681	6.9000e-003	0.0000	6.9100e-003	0.0000	0.5976	0.5976	1.0000e-005	0.0000	0.5980
Total	**2.8000e-004**	**2.0000e-004**	**2.0100e-003**	**1.0000e-005**	**0.0681**	**0.0000**	**0.0681**	**6.9000e-003**	**0.0000**	**6.9100e-003**	**0.0000**	**0.5976**	**0.5976**	**1.0000e-005**	**0.0000**	**0.5980**

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					0.0287	0.0000	0.0287	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**9.7200e-003**	**0.1055**	**0.0642**	**1.2000e-004**	**0.0287**	**5.0900e-003**	**0.0338**	**0.0137**	**4.6900e-003**	**0.0184**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.3 Grading - 2020

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	2.8000e-004	2.0000e-004	2.0100e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5976	0.5976	1.0000e-005	0.0000	0.5980
Total	**2.8000e-004**	**2.0000e-004**	**2.0100e-003**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**6.3000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5976**	**0.5976**	**1.0000e-005**	**0.0000**	**0.5980**

3.4 Building Construction - 2020

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	0.0827	0.7483	0.6571	1.0500e-003		0.0436	0.0436		0.0410	0.0410	0.0000	90.3279	90.3279	0.0220	0.0000	90.8788
Total	**0.0827**	**0.7483**	**0.6571**	**1.0500e-003**		**0.0436**	**0.0436**		**0.0410**	**0.0410**	**0.0000**	**90.3279**	**90.3279**	**0.0220**	**0.0000**	**90.8788**

3.4 Building Construction - 2020

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	4.3400e-003	0.1339	0.0267	3.6000e-004	0.7189	6.6000e-004	0.7196	0.0733	6.3000e-004	0.0739	0.0000	33.9288	33.9288	1.7500e-003	0.0000	33.9726
Worker	0.0337	0.0240	0.2394	7.9000e-004	8.1033	5.3000e-004	8.1038	0.8211	4.9000e-004	0.8216	0.0000	71.0832	71.0832	1.7300e-003	0.0000	71.1264
Total	**0.0380**	**0.1579**	**0.2661**	**1.1500e-003**	**8.8222**	**1.1900e-003**	**8.8234**	**0.8944**	**1.1200e-003**	**0.8955**	**0.0000**	**105.0119**	**105.0119**	**3.4800e-003**	**0.0000**	**105.0990**

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	0.0827	0.7483	0.6571	1.0500e-003		0.0436	0.0436		0.0410	0.0410	0.0000	90.3278	90.3278	0.0220	0.0000	90.8787
Total	**0.0827**	**0.7483**	**0.6571**	**1.0500e-003**		**0.0436**	**0.0436**		**0.0410**	**0.0410**	**0.0000**	**90.3278**	**90.3278**	**0.0220**	**0.0000**	**90.8787**

3.4 Building Construction - 2020

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	4.3400e-003	0.1339	0.0267	3.6000e-004	8.1800e-003	6.6000e-004	8.8400e-003	2.3800e-003	6.3000e-004	3.0100e-003	0.0000	33.9288	33.9288	1.7500e-003	0.0000	33.9726
Worker	0.0337	0.0240	0.2394	7.9000e-004	0.0747	5.3000e-004	0.0752	0.0199	4.9000e-004	0.0204	0.0000	71.0832	71.0832	1.7300e-003	0.0000	71.1264
Total	**0.0380**	**0.1579**	**0.2661**	**1.1500e-003**	**0.0828**	**1.1900e-003**	**0.0840**	**0.0223**	**1.1200e-003**	**0.0234**	**0.0000**	**105.0119**	**105.0119**	**3.4800e-003**	**0.0000**	**105.0990**

3.4 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	0.1445	1.3248	1.2597	2.0500e-003		0.0729	0.0729		0.0685	0.0685	0.0000	176.0443	176.0443	0.0425	0.0000	177.1061
Total	**0.1445**	**1.3248**	**1.2597**	**2.0500e-003**		**0.0729**	**0.0729**		**0.0685**	**0.0685**	**0.0000**	**176.0443**	**176.0443**	**0.0425**	**0.0000**	**177.1061**

3.4 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	6.9800e-003	0.2379	0.0452	6.9000e-004	1.4010	6.3000e-004	1.4016	0.1428	6.0000e-004	0.1434	0.0000	65.5115	65.5115	3.2500e-003	0.0000	65.5928
Worker	0.0610	0.0419	0.4261	1.4800e-003	15.7910	1.0100e-003	15.7920	1.6001	9.3000e-004	1.6010	0.0000	133.6803	133.6803	3.0200e-003	0.0000	133.7558
Total	**0.0680**	**0.2798**	**0.4714**	**2.1700e-003**	**17.1919**	**1.6400e-003**	**17.1935**	**1.7429**	**1.5300e-003**	**1.7444**	**0.0000**	**199.1919**	**199.1919**	**6.2700e-003**	**0.0000**	**199.3486**

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	0.1445	1.3248	1.2597	2.0500e-003		0.0729	0.0729		0.0685	0.0685	0.0000	176.0441	176.0441	0.0425	0.0000	177.1059
Total	**0.1445**	**1.3248**	**1.2597**	**2.0500e-003**		**0.0729**	**0.0729**		**0.0685**	**0.0685**	**0.0000**	**176.0441**	**176.0441**	**0.0425**	**0.0000**	**177.1059**

3.4 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	6.9800e-003	0.2379	0.0452	6.9000e-004	0.0160	6.3000e-004	0.0166	4.6400e-003	6.0000e-004	5.2400e-003	0.0000	65.5115	65.5115	3.2500e-003	0.0000	65.5928
Worker	0.0610	0.0419	0.4261	1.4800e-003	0.1455	1.0100e-003	0.1465	0.0388	9.3000e-004	0.0398	0.0000	133.6803	133.6803	3.0200e-003	0.0000	133.7558
Total	**0.0680**	**0.2798**	**0.4714**	**2.1700e-003**	**0.1614**	**1.6400e-003**	**0.1631**	**0.0435**	**1.5300e-003**	**0.0450**	**0.0000**	**199.1919**	**199.1919**	**6.2700e-003**	**0.0000**	**199.3486**

3.5 Paving - 2020

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	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0107**	**0.1062**	**0.1105**	**1.7000e-004**		**5.8600e-003**	**5.8600e-003**		**5.4000e-003**	**5.4000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.5 Paving - 2020

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	8.5000e-004	6.1000e-004	6.0400e-003	2.0000e-005	0.2044	1.0000e-005	0.2044	0.0207	1.0000e-005	0.0207	0.0000	1.7928	1.7928	4.0000e-005	0.0000	1.7939
Total	**8.5000e-004**	**6.1000e-004**	**6.0400e-003**	**2.0000e-005**	**0.2044**	**1.0000e-005**	**0.2044**	**0.0207**	**1.0000e-005**	**0.0207**	**0.0000**	**1.7928**	**1.7928**	**4.0000e-005**	**0.0000**	**1.7939**

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	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0107**	**0.1062**	**0.1105**	**1.7000e-004**		**5.8600e-003**	**5.8600e-003**		**5.4000e-003**	**5.4000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.5 Paving - 2020

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	8.5000e-004	6.1000e-004	6.0400e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.9000e-003	5.0000e-004	1.0000e-005	5.2000e-004	0.0000	1.7928	1.7928	4.0000e-005	0.0000	1.7939
Total	**8.5000e-004**	**6.1000e-004**	**6.0400e-003**	**2.0000e-005**	**1.8800e-003**	**1.0000e-005**	**1.9000e-003**	**5.0000e-004**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**1.7928**	**1.7928**	**4.0000e-005**	**0.0000**	**1.7939**

3.6 Architectural Coating - 2020

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	0.1078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1100e-003	0.0564	0.0614	1.0000e-004		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	8.5534	8.5534	6.6000e-004	0.0000	8.5700
Total	**0.1159**	**0.0564**	**0.0614**	**1.0000e-004**		**3.7200e-003**	**3.7200e-003**		**3.7200e-003**	**3.7200e-003**	**0.0000**	**8.5534**	**8.5534**	**6.6000e-004**	**0.0000**	**8.5700**

3.6 Architectural Coating - 2020

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	5.8500e-003	4.1700e-003	0.0416	1.4000e-004	1.4073	9.0000e-005	1.4074	0.1426	9.0000e-005	0.1427	0.0000	12.3452	12.3452	3.0000e-004	0.0000	12.3527
Total	**5.8500e-003**	**4.1700e-003**	**0.0416**	**1.4000e-004**	**1.4073**	**9.0000e-005**	**1.4074**	**0.1426**	**9.0000e-005**	**0.1427**	**0.0000**	**12.3452**	**12.3452**	**3.0000e-004**	**0.0000**	**12.3527**

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	0.1078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1100e-003	0.0564	0.0614	1.0000e-004		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	8.5534	8.5534	6.6000e-004	0.0000	8.5700
Total	**0.1159**	**0.0564**	**0.0614**	**1.0000e-004**		**3.7200e-003**	**3.7200e-003**		**3.7200e-003**	**3.7200e-003**	**0.0000**	**8.5534**	**8.5534**	**6.6000e-004**	**0.0000**	**8.5700**

3.6 Architectural Coating - 2020

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	5.8500e-003	4.1700e-003	0.0416	1.4000e-004	0.0130	9.0000e-005	0.0131	3.4600e-003	9.0000e-005	3.5500e-003	0.0000	12.3452	12.3452	3.0000e-004	0.0000	12.3527
Total	**5.8500e-003**	**4.1700e-003**	**0.0416**	**1.4000e-004**	**0.0130**	**9.0000e-005**	**0.0131**	**3.4600e-003**	**9.0000e-005**	**3.5500e-003**	**0.0000**	**12.3452**	**12.3452**	**3.0000e-004**	**0.0000**	**12.3527**

3.6 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	0.2622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1244	0.1481	2.4000e-004		7.6700e-003	7.6700e-003		7.6700e-003	7.6700e-003	0.0000	20.8090	20.8090	1.4300e-003	0.0000	20.8447
Total	**0.2800**	**0.1244**	**0.1481**	**2.4000e-004**		**7.6700e-003**	**7.6700e-003**		**7.6700e-003**	**7.6700e-003**	**0.0000**	**20.8090**	**20.8090**	**1.4300e-003**	**0.0000**	**20.8447**

3.6 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	0.0132	9.0800e-003	0.0924	3.2000e-004	3.4238	2.2000e-004	3.4240	0.3469	2.0000e-004	0.3471	0.0000	28.9843	28.9843	6.5000e-004	0.0000	29.0006
Total	**0.0132**	**9.0800e-003**	**0.0924**	**3.2000e-004**	**3.4238**	**2.2000e-004**	**3.4240**	**0.3469**	**2.0000e-004**	**0.3471**	**0.0000**	**28.9843**	**28.9843**	**6.5000e-004**	**0.0000**	**29.0006**

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	0.2622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1244	0.1481	2.4000e-004		7.6700e-003	7.6700e-003		7.6700e-003	7.6700e-003	0.0000	20.8090	20.8090	1.4300e-003	0.0000	20.8447
Total	**0.2800**	**0.1244**	**0.1481**	**2.4000e-004**		**7.6700e-003**	**7.6700e-003**		**7.6700e-003**	**7.6700e-003**	**0.0000**	**20.8090**	**20.8090**	**1.4300e-003**	**0.0000**	**20.8447**

3.6 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	0.0132	9.0800e-003	0.0924	3.2000e-004	0.0315	2.2000e-004	0.0318	8.4200e-003	2.0000e-004	8.6200e-003	0.0000	28.9843	28.9843	6.5000e-004	0.0000	29.0006
Total	**0.0132**	**9.0800e-003**	**0.0924**	**3.2000e-004**	**0.0315**	**2.2000e-004**	**0.0318**	**8.4200e-003**	**2.0000e-004**	**8.6200e-003**	**0.0000**	**28.9843**	**28.9843**	**6.5000e-004**	**0.0000**	**29.0006**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	0.3769	2.8299	4.3912	0.0194	1.4185	0.0162	1.4347	0.3819	0.0153	0.3971	0.0000	1,788.2293	1,788.2293	0.0814	0.0000	1,790.2642
Unmitigated	0.3882	2.9232	4.6134	0.0205	1.5082	0.0172	1.5253	0.4060	0.0161	0.4221	0.0000	1,891.3806	1,891.3806	0.0845	0.0000	1,893.4925

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	659.00	716.00	607.00	2,479,314	2,331,795
Congregate Care (Assisted Living)	421.96	338.80	375.76	1,516,344	1,426,121
Total	1,080.96	1,054.80	982.76	3,995,658	3,757,916

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Apartments Low Rise	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3
Congregate Care (Assisted	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	129.1542	129.1542	0.0139	2.8800e-003	130.3585
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	129.1542	129.1542	0.0139	2.8800e-003	130.3585
NaturalGas Mitigated	0.0102	0.0869	0.0370	5.5000e-004		7.0300e-003	7.0300e-003		7.0300e-003	7.0300e-003	0.0000	100.6460	100.6460	1.9300e-003	1.8500e-003	101.2441
NaturalGas Unmitigated	0.0102	0.0869	0.0370	5.5000e-004		7.0300e-003	7.0300e-003		7.0300e-003	7.0300e-003	0.0000	100.6460	100.6460	1.9300e-003	1.8500e-003	101.2441

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					
Apartments Low Rise	711051	3.8300e-003	0.0328	0.0139	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	37.9444	37.9444	7.3000e-004	7.0000e-004	38.1699
Congregate Care (Assisted Living)	1.17498e+006	6.3400e-003	0.0541	0.0230	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	62.7017	62.7017	1.2000e-003	1.1500e-003	63.0743
Total		**0.0102**	**0.0869**	**0.0370**	**5.6000e-004**		**7.0300e-003**	**7.0300e-003**		**7.0300e-003**	**7.0300e-003**	**0.0000**	**100.6460**	**100.6460**	**1.9300e-003**	**1.8500e-003**	**101.2441**

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					
Apartments Low Rise	711051	3.8300e-003	0.0328	0.0139	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	37.9444	37.9444	7.3000e-004	7.0000e-004	38.1699
Congregate Care (Assisted Living)	1.17498e+006	6.3400e-003	0.0541	0.0230	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	62.7017	62.7017	1.2000e-003	1.1500e-003	63.0743
Total		**0.0102**	**0.0869**	**0.0370**	**5.6000e-004**		**7.0300e-003**	**7.0300e-003**		**7.0300e-003**	**7.0300e-003**	**0.0000**	**100.6460**	**100.6460**	**1.9300e-003**	**1.8500e-003**	**101.2441**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	422335	51.6275	5.5600e-003	1.1500e-003	52.1089
Congregate Care (Assisted Living)	634200	77.5266	8.3400e-003	1.7300e-003	78.2496
Total		**129.1542**	**0.0139**	**2.8800e-003**	**130.3585**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	422335	51.6275	5.5600e-003	1.1500e-003	52.1089
Congregate Care (Assisted Living)	634200	77.5266	8.3400e-003	1.7300e-003	78.2496
Total		**129.1542**	**0.0139**	**2.8800e-003**	**130.3585**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	0.3249	0.0218	1.8880	1.0000e-004		0.0104	0.0104		0.0104	0.0104	0.0000	3.0807	3.0807	2.9700e-003	0.0000	3.1550
Unmitigated	23.9269	0.4381	31.0682	0.0528		4.1024	4.1024		4.1024	4.1024	390.0020	113.1154	503.1174	0.3675	0.0296	521.1215

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	0.0370					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	23.6020	0.4163	29.1802	0.0527		4.0919	4.0919		4.0919	4.0919	390.0020	110.0347	500.0367	0.3645	0.0296	517.9665
Landscaping	0.0570	0.0218	1.8880	1.0000e-004		0.0104	0.0104		0.0104	0.0104	0.0000	3.0807	3.0807	2.9700e-003	0.0000	3.1550
Total	**23.9269**	**0.4381**	**31.0682**	**0.0528**		**4.1024**	**4.1024**		**4.1024**	**4.1024**	**390.0020**	**113.1154**	**503.1174**	**0.3675**	**0.0296**	**521.1215**

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	0.0370					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2309					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	0.0570	0.0218	1.8880	1.0000e-004		0.0104	0.0104		0.0104	0.0104	0.0000	3.0807	3.0807	2.9700e-003	0.0000	3.1550
Total	**0.3249**	**0.0218**	**1.8880**	**1.0000e-004**		**0.0104**	**0.0104**		**0.0104**	**0.0104**	**0.0000**	**3.0807**	**3.0807**	**2.9700e-003**	**0.0000**	**3.1550**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	20.6607	0.5409	0.0131	38.0801
Unmitigated	20.6607	0.5409	0.0131	38.0801

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	6.5154 / 4.10754	8.1341	0.2130	5.1500e-003	14.9922
Congregate Care (Assisted Living)	10.0337 / 6.32561	12.5265	0.3280	7.9300e-003	23.0879
Total		**20.6606**	**0.5409**	**0.0131**	**38.0801**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	6.5154 / 4.10754	8.1341	0.2130	5.1500e-003	14.9922
Congregate Care (Assisted Living)	10.0337 / 6.32561	12.5265	0.3280	7.9300e-003	23.0879
Total		**20.6606**	**0.5409**	**0.0131**	**38.0801**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	37.8639	2.2377	0.0000	93.8062
Unmitigated	37.8639	2.2377	0.0000	93.8062

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	46	9.3376	0.5518	0.0000	23.1335
Congregate Care (Assisted Living)	140.53	28.5263	1.6859	0.0000	70.6728
Total		**37.8639**	**2.2377**	**0.0000**	**93.8062**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	46	9.3376	0.5518	0.0000	23.1335
Congregate Care (Assisted Living)	140.53	28.5263	1.6859	0.0000	70.6728
Total		**37.8639**	**2.2377**	**0.0000**	**93.8062**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

East Beamer - Permanent Facilities

Yolo/Solano AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	100.00	Dwelling Unit	2.75	23,040.00	100
Congregate Care (Assisted Living)	154.00	Dwelling Unit	2.07	36,080.00	154

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	6.8	**Precipitation Freq (Days)**	55
Climate Zone	2			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	269.5	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor updated per PG&Es RPS projections.

Land Use - Square footage/acreage has been adjusted per the preliminary site plan provided by the project applicant.

Construction Phase - Total days required for architectural coating was updated to reflect the coating taking place concurrently with building construction.

Vehicle Trips - Community Center (Arena) trip rates are set to zero because applicant intends that neighborhood residents will access that facility on foot.

Road Dust - All roads to and from the project site would be paved.

Energy Use - Title 24 Energy Intensities are adjusted to comply with the 2019 CBSC (which require a 53% reduction for residences and 30% for commercial)

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Grading - Total acres graded edited to incorporate the cut area.

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	PhaseEndDate	8/26/2021	8/17/2021
tblConstructionPhase	PhaseEndDate	7/7/2021	8/2/2021
tblConstructionPhase	PhaseEndDate	8/2/2021	9/14/2020
tblConstructionPhase	PhaseStartDate	8/3/2021	9/30/2020
tblConstructionPhase	PhaseStartDate	8/20/2020	9/15/2020
tblConstructionPhase	PhaseStartDate	7/8/2021	8/20/2020
tblEnergyUse	T24E	511.12	240.23
tblEnergyUse	T24E	460.92	322.64
tblEnergyUse	T24NG	9,411.72	4,423.51
tblEnergyUse	T24NG	7,061.10	4,942.77
tblGrading	AcresOfGrading	4.00	8.71
tblLandUse	LandUseSquareFeet	100,000.00	23,040.00
tblLandUse	LandUseSquareFeet	154,000.00	36,080.00
tblLandUse	LotAcreage	6.25	2.75
tblLandUse	LotAcreage	9.63	2.07
tblLandUse	Population	286.00	100.00
tblLandUse	Population	440.00	154.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	94	100

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					
2020	6.8286	42.4716	27.9661	0.0658	315.4433	2.1988	316.7045	31.9142	2.0229	33.1066	0.0000	6,457.9939	6,457.9939	1.1972	0.0000	6,476.9290
2021	6.4861	22.6282	26.8613	0.0648	315.4433	1.0768	316.5200	31.9142	1.0178	32.9320	0.0000	6,356.6853	6,356.6853	0.7389	0.0000	6,375.1573
Maximum	**6.8286**	**42.4716**	**27.9661**	**0.0658**	**315.4433**	**2.1988**	**316.7045**	**31.9142**	**2.0229**	**33.1066**	**0.0000**	**6,457.9939**	**6,457.9939**	**1.1972**	**0.0000**	**6,476.9290**

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					
2020	6.8286	42.4716	27.9661	0.0658	18.2609	2.1988	20.4596	9.9825	2.0229	12.0054	0.0000	6,457.9939	6,457.9939	1.1972	0.0000	6,476.9290
2021	6.4861	22.6282	26.8613	0.0648	2.5939	1.0768	3.6706	0.6958	1.0178	1.7136	0.0000	6,356.6853	6,356.6853	0.7389	0.0000	6,375.1573
Maximum	**6.8286**	**42.4716**	**27.9661**	**0.0658**	**18.2609**	**2.1988**	**20.4596**	**9.9825**	**2.0229**	**12.0054**	**0.0000**	**6,457.9939**	**6,457.9939**	**1.1972**	**0.0000**	**6,476.9290**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**96.69**	**0.00**	**96.19**	**83.27**	**0.00**	**79.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	577.7595	10.3959	732.6903	1.2867		99.9193	99.9193		99.9193	99.9193	10,485.4540	2,996.0852	13,481.5393	9.8359	0.7955	13,964.5042
Energy	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208
Mobile	2.6778	16.6367	30.0032	0.1283	9.1621	0.1003	9.2624	2.4595	0.0943	2.5538		13,042.8877	13,042.8877	0.5512		13,056.6686
Total	**580.4930**	**27.5087**	**762.8961**	**1.4180**	**9.1621**	**100.0582**	**109.2202**	**2.4595**	**100.0521**	**102.5116**	**10,485.4540**	**16,646.8812**	**27,132.3352**	**10.3987**	**0.8067**	**27,632.6935**

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	2.1015	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159	0.0000	37.7323	37.7323	0.0364	0.0000	38.6424
Energy	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208
Mobile	2.6090	16.1260	28.4703	0.1212	8.6169	0.0949	8.7118	2.3132	0.0892	2.4024		12,330.8000	12,330.8000	0.5302		12,344.0545
Total	**4.7662**	**16.8442**	**49.6508**	**0.1254**	**8.6169**	**0.2493**	**8.8663**	**2.3132**	**0.2436**	**2.5568**	**0.0000**	**12,976.4405**	**12,976.4405**	**0.5782**	**0.0111**	**12,994.2176**

	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	N20	CO2e
Percent Reduction	**99.18**	**38.77**	**93.49**	**91.16**	**5.95**	**99.75**	**91.88**	**5.95**	**99.76**	**97.51**	**100.00**	**22.05**	**52.17**	**94.44**	**98.62**	**52.98**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/1/2020	8/7/2020	5	5	
2	Grading	Grading	8/8/2020	8/19/2020	5	8	
3	Building Construction	Building Construction	9/15/2020	8/2/2021	5	230	
4	Paving	Paving	8/20/2020	9/14/2020	5	18	
5	Architectural Coating	Architectural Coating	9/30/2020	8/17/2021	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.71

Acres of Paving: 0

Residential Indoor: 119,718; Residential Outdoor: 39,906; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Summer

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

Trips and VMT

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
Site Preparation	7	18.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	183.00	27.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

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	0.0933	0.0542	0.7077	2.1800e-003	24.0358	1.3500e-003	24.0371	2.4309	1.2400e-003	2.4321		217.0847	217.0847	5.3800e-003		217.2191
Total	**0.0933**	**0.0542**	**0.7077**	**2.1800e-003**	**24.0358**	**1.3500e-003**	**24.0371**	**2.4309**	**1.2400e-003**	**2.4321**		**217.0847**	**217.0847**	**5.3800e-003**		**217.2191**

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	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

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	0.0933	0.0542	0.7077	2.1800e-003	0.1946	1.3500e-003	0.1959	0.0518	1.2400e-003	0.0531		217.0847	217.0847	5.3800e-003		217.2191
Total	**0.0933**	**0.0542**	**0.7077**	**2.1800e-003**	**0.1946**	**1.3500e-003**	**0.1959**	**0.0518**	**1.2400e-003**	**0.0531**		**217.0847**	**217.0847**	**5.3800e-003**		**217.2191**

3.3 Grading - 2020

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					7.1767	0.0000	7.1767	3.4349	0.0000	3.4349			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**7.1767**	**1.2734**	**8.4501**	**3.4349**	**1.1716**	**4.6065**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.3 Grading - 2020

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	0.0778	0.0452	0.5897	1.8200e-003	20.0298	1.1200e-003	20.0309	2.0257	1.0300e-003	2.0268		180.9039	180.9039	4.4800e-003		181.0159
Total	**0.0778**	**0.0452**	**0.5897**	**1.8200e-003**	**20.0298**	**1.1200e-003**	**20.0309**	**2.0257**	**1.0300e-003**	**2.0268**		**180.9039**	**180.9039**	**4.4800e-003**		**181.0159**

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					7.1767	0.0000	7.1767	3.4349	0.0000	3.4349			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**7.1767**	**1.2734**	**8.4501**	**3.4349**	**1.1716**	**4.6065**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.3 Grading - 2020

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	0.0778	0.0452	0.5897	1.8200e-003	0.1622	1.1200e-003	0.1633	0.0432	1.0300e-003	0.0442		180.9039	180.9039	4.4800e-003		181.0159
Total	**0.0778**	**0.0452**	**0.5897**	**1.8200e-003**	**0.1622**	**1.1200e-003**	**0.1633**	**0.0432**	**1.0300e-003**	**0.0442**		**180.9039**	**180.9039**	**4.4800e-003**		**181.0159**

3.4 Building Construction - 2020

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

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	0.1093	3.3643	0.6367	9.2700e-003	21.6726	0.0168	21.6894	2.2036	0.0160	2.2196		970.2259	970.2259	0.0470		971.4017
Worker	0.9487	0.5514	7.1948	0.0222	244.3638	0.0137	244.3775	24.7138	0.0126	24.7264		2,207.0274	2,207.0274	0.0547		2,208.3941
Total	**1.0580**	**3.9157**	**7.8315**	**0.0314**	**266.0364**	**0.0304**	**266.0668**	**26.9174**	**0.0286**	**26.9460**		**3,177.2533**	**3,177.2533**	**0.1017**		**3,179.7958**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

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	0.1093	3.3643	0.6367	9.2700e-003	0.2155	0.0168	0.2323	0.0624	0.0160	0.0785		970.2259	970.2259	0.0470		971.4017
Worker	0.9487	0.5514	7.1948	0.0222	1.9783	0.0137	1.9920	0.5268	0.0126	0.5394		2,207.0274	2,207.0274	0.0547		2,208.3941
Total	**1.0580**	**3.9157**	**7.8315**	**0.0314**	**2.1939**	**0.0304**	**2.2243**	**0.5892**	**0.0286**	**0.6179**		**3,177.2533**	**3,177.2533**	**0.1017**		**3,179.7958**

3.4 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
Total	**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**

3.4 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	0.0901	3.0761	0.5518	9.1800e-003	21.6726	8.0800e-003	21.6807	2.2036	7.7300e-003	2.2113		961.3682	961.3682	0.0447		962.4848
Worker	0.8813	0.4935	6.5853	0.0214	244.3638	0.0133	244.3771	24.7138	0.0122	24.7260		2,129.8747	2,129.8747	0.0490		2,131.0993
Total	**0.9714**	**3.5695**	**7.1371**	**0.0305**	**266.0364**	**0.0214**	**266.0577**	**26.9174**	**0.0200**	**26.9373**		**3,091.2430**	**3,091.2430**	**0.0936**		**3,093.5841**

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
Total	**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**

3.4 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	0.0901	3.0761	0.5518	9.1800e-003	0.2155	8.0800e-003	0.2236	0.0624	7.7300e-003	0.0702		961.3682	961.3682	0.0447		962.4848
Worker	0.8813	0.4935	6.5853	0.0214	1.9783	0.0133	1.9916	0.5268	0.0122	0.5391		2,129.8747	2,129.8747	0.0490		2,131.0993
Total	**0.9714**	**3.5695**	**7.1371**	**0.0305**	**2.1939**	**0.0214**	**2.2152**	**0.5892**	**0.0200**	**0.6092**		**3,091.2430**	**3,091.2430**	**0.0936**		**3,093.5841**

3.5 Paving - 2020

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1837**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**		**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.5 Paving - 2020

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	0.1037	0.0603	0.7863	2.4200e-003	26.7064	1.4900e-003	26.7079	2.7010	1.3800e-003	2.7023		241.2052	241.2052	5.9700e-003		241.3545
Total	**0.1037**	**0.0603**	**0.7863**	**2.4200e-003**	**26.7064**	**1.4900e-003**	**26.7079**	**2.7010**	**1.3800e-003**	**2.7023**		**241.2052**	**241.2052**	**5.9700e-003**		**241.3545**

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1837**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**	**0.0000**	**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.5 Paving - 2020

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	0.1037	0.0603	0.7863	2.4200e-003	0.2162	1.4900e-003	0.2177	0.0576	1.3800e-003	0.0590		241.2052	241.2052	5.9700e-003		241.3545
Total	**0.1037**	**0.0603**	**0.7863**	**2.4200e-003**	**0.2162**	**1.4900e-003**	**0.2177**	**0.0576**	**1.3800e-003**	**0.0590**		**241.2052**	**241.2052**	**5.9700e-003**		**241.3545**

3.6 Architectural Coating - 2020

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	3.2168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**3.4590**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

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	0.1918	0.1115	1.4547	4.4800e-003	49.4069	2.7700e-003	49.4097	4.9968	2.5500e-003	4.9993		446.2296	446.2296	0.0111		446.5059
Total	**0.1918**	**0.1115**	**1.4547**	**4.4800e-003**	**49.4069**	**2.7700e-003**	**49.4097**	**4.9968**	**2.5500e-003**	**4.9993**		**446.2296**	**446.2296**	**0.0111**		**446.5059**

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	3.2168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**3.4590**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

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	0.1918	0.1115	1.4547	4.4800e-003	0.4000	2.7700e-003	0.4028	0.1065	2.5500e-003	0.1091		446.2296	446.2296	0.0111		446.5059
Total	**0.1918**	**0.1115**	**1.4547**	**4.4800e-003**	**0.4000**	**2.7700e-003**	**0.4028**	**0.1065**	**2.5500e-003**	**0.1091**		**446.2296**	**446.2296**	**0.0111**		**446.5059**

3.6 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	3.2168					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
Total	**3.4357**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 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	0.1782	0.0998	1.3315	4.3200e-003	49.4069	2.6900e-003	49.4096	4.9968	2.4700e-003	4.9993		430.6304	430.6304	9.9000e-003		430.8780
Total	**0.1782**	**0.0998**	**1.3315**	**4.3200e-003**	**49.4069**	**2.6900e-003**	**49.4096**	**4.9968**	**2.4700e-003**	**4.9993**		**430.6304**	**430.6304**	**9.9000e-003**		**430.8780**

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	3.2168					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
Total	**3.4357**	**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**

3.6 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	0.1782	0.0998	1.3315	4.3200e-003	0.4000	2.6900e-003	0.4027	0.1065	2.4700e-003	0.1090		430.6304	430.6304	9.9000e-003		430.8780
Total	**0.1782**	**0.0998**	**1.3315**	**4.3200e-003**	**0.4000**	**2.6900e-003**	**0.4027**	**0.1065**	**2.4700e-003**	**0.1090**		**430.6304**	**430.6304**	**9.9000e-003**		**430.8780**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	2.6090	16.1260	28.4703	0.1212	8.6169	0.0949	8.7118	2.3132	0.0892	2.4024		12,330.8000	12,330.8000	0.5302		12,344.0545
Unmitigated	2.6778	16.6367	30.0032	0.1283	9.1621	0.1003	9.2624	2.4595	0.0943	2.5538		13,042.8877	13,042.8877	0.5512		13,056.6686

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	659.00	716.00	607.00	2,479,314	2,331,795
Congregate Care (Assisted Living)	421.96	338.80	375.76	1,516,344	1,426,121
Total	1,080.96	1,054.80	982.76	3,995,658	3,757,916

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Apartments Low Rise	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3
Congregate Care (Assisted	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day					
NaturalGas Mitigated	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208
NaturalGas Unmitigated	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208

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					
Apartments Low Rise	1948.08	0.0210	0.1795	0.0764	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1864	229.1864	4.3900e-003	4.2000e-003	230.5483
Congregate Care (Assisted Living)	3219.14	0.0347	0.2967	0.1262	1.8900e-003		0.0240	0.0240		0.0240	0.0240		378.7219	378.7219	7.2600e-003	6.9400e-003	380.9724
Total		**0.0557**	**0.4762**	**0.2026**	**3.0400e-003**		**0.0385**	**0.0385**		**0.0385**	**0.0385**		**607.9083**	**607.9083**	**0.0117**	**0.0111**	**611.5208**

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					
Apartments Low Rise	1.94808	0.0210	0.1795	0.0764	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1864	229.1864	4.3900e-003	4.2000e-003	230.5483
Congregate Care (Assisted Living)	3.21914	0.0347	0.2967	0.1262	1.8900e-003		0.0240	0.0240		0.0240	0.0240		378.7219	378.7219	7.2600e-003	6.9400e-003	380.9724
Total		**0.0557**	**0.4762**	**0.2026**	**3.0400e-003**		**0.0385**	**0.0385**		**0.0385**	**0.0385**		**607.9083**	**607.9083**	**0.0117**	**0.0111**	**611.5208**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	2.1015	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159	0.0000	37.7323	37.7323	0.0364	0.0000	38.6424
Unmitigated	577.7595	10.3959	732.6903	1.2867		99.9193	99.9193		99.9193	99.9193	10,485.4540	2,996.0852	13,481.5393	9.8359	0.7955	13,964.5042

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	0.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2652					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	575.6580	10.1539	711.7124	1.2856		99.8034	99.8034		99.8034	99.8034	10,485.4540	2,958.3529	13,443.8070	9.7995	0.7955	13,925.8618
Landscaping	0.6336	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159		37.7323	37.7323	0.0364		38.6424
Total	**577.7595**	**10.3959**	**732.6903**	**1.2867**		**99.9193**	**99.9193**		**99.9193**	**99.9193**	**10,485.4540**	**2,996.0852**	**13,481.5393**	**9.8359**	**0.7955**	**13,964.5042**

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	0.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2652					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	0.6336	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159		37.7323	37.7323	0.0364		38.6424
Total	**2.1015**	**0.2419**	**20.9779**	**1.1100e-003**		**0.1159**	**0.1159**		**0.1159**	**0.1159**	**0.0000**	**37.7323**	**37.7323**	**0.0364**	**0.0000**	**38.6424**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

East Beamer - Permanent Facilities

Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	100.00	Dwelling Unit	2.75	23,040.00	100
Congregate Care (Assisted Living)	154.00	Dwelling Unit	2.07	36,080.00	154

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	6.8	**Precipitation Freq (Days)**	55
Climate Zone	2			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	269.5	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Winter

Project Characteristics - CO2 intensity factor updated per PG&Es RPS projections.

Land Use - Square footage/acreage has been adjusted per the preliminary site plan provided by the project applicant.

Construction Phase - Total days required for architectural coating was updated to reflect the coating taking place concurrently with building construction.

Vehicle Trips - Community Center (Arena) trip rates are set to zero because applicant intends that neighborhood residents will access that facility on foot.

Road Dust - All roads to and from the project site would be paved.

Energy Use - Title 24 Energy Intensities are adjusted to comply with the 2019 CBSC (which require a 53% reduction for residences and 30% for commercial)

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Grading - Total acres graded edited to incorporate the cut area.

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	PhaseEndDate	8/26/2021	8/17/2021
tblConstructionPhase	PhaseEndDate	7/7/2021	8/2/2021
tblConstructionPhase	PhaseEndDate	8/2/2021	9/14/2020
tblConstructionPhase	PhaseStartDate	8/3/2021	9/30/2020
tblConstructionPhase	PhaseStartDate	8/20/2020	9/15/2020
tblConstructionPhase	PhaseStartDate	7/8/2021	8/20/2020
tblEnergyUse	T24E	511.12	240.23
tblEnergyUse	T24E	460.92	322.64
tblEnergyUse	T24NG	9,411.72	4,423.51
tblEnergyUse	T24NG	7,061.10	4,942.77
tblGrading	AcresOfGrading	4.00	8.71
tblLandUse	LandUseSquareFeet	100,000.00	23,040.00
tblLandUse	LandUseSquareFeet	154,000.00	36,080.00
tblLandUse	LotAcreage	6.25	2.75
tblLandUse	LotAcreage	9.63	2.07
tblLandUse	Population	286.00	100.00
tblLandUse	Population	440.00	154.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	94	100

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					
2020	6.8314	42.4857	26.8757	0.0625	315.4433	2.1988	316.7049	31.9142	2.0229	33.1070	0.0000	6,132.4139	6,132.4139	1.1966	0.0000	6,151.3040
2021	6.4901	22.8317	25.8359	0.0616	315.4433	1.0771	316.5204	31.9142	1.0182	32.9323	0.0000	6,041.7387	6,041.7387	0.7376	0.0000	6,060.1783
Maximum	**6.8314**	**42.4857**	**26.8757**	**0.0625**	**315.4433**	**2.1988**	**316.7049**	**31.9142**	**2.0229**	**33.1070**	**0.0000**	**6,132.4139**	**6,132.4139**	**1.1966**	**0.0000**	**6,151.3040**

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					
2020	6.8314	42.4857	26.8757	0.0625	18.2609	2.1988	20.4596	9.9825	2.0229	12.0054	0.0000	6,132.4139	6,132.4139	1.1966	0.0000	6,151.3040
2021	6.4901	22.8317	25.8359	0.0616	2.5939	1.0771	3.6710	0.6958	1.0182	1.7139	0.0000	6,041.7387	6,041.7387	0.7376	0.0000	6,060.1783
Maximum	**6.8314**	**42.4857**	**26.8757**	**0.0625**	**18.2609**	**2.1988**	**20.4596**	**9.9825**	**2.0229**	**12.0054**	**0.0000**	**6,132.4139**	**6,132.4139**	**1.1966**	**0.0000**	**6,151.3040**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**96.69**	**0.00**	**96.19**	**83.27**	**0.00**	**79.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	577.7595	10.3959	732.6903	1.2867		99.9193	99.9193		99.9193	99.9193	10,485.4540	2,996.0852	13,481.5393	9.8359	0.7955	13,964.5042
Energy	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208
Mobile	2.2234	17.4959	28.2608	0.1181	9.1621	0.1018	9.2639	2.4595	0.0957	2.5553		12,021.7278	12,021.7278	0.5661		12,035.8810
Total	**580.0386**	**28.3679**	**761.1537**	**1.4078**	**9.1621**	**100.0597**	**109.2217**	**2.4595**	**100.0536**	**102.5131**	**10,485.4540**	**15,625.7213**	**26,111.1754**	**10.4136**	**0.8067**	**26,611.9060**

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	2.1015	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159	0.0000	37.7323	37.7323	0.0364	0.0000	38.6424
Energy	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208
Mobile	2.1558	16.9232	26.9625	0.1116	8.6169	0.0964	8.7134	2.3132	0.0906	2.4038		11,363.1455	11,363.1455	0.5462		11,376.8015
Total	**4.3130**	**17.6414**	**48.1431**	**0.1158**	**8.6169**	**0.2508**	**8.8678**	**2.3132**	**0.2451**	**2.5582**	**0.0000**	**12,008.7861**	**12,008.7861**	**0.5943**	**0.0111**	**12,026.9647**

	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	N20	CO2e
Percent Reduction	**99.26**	**37.81**	**93.67**	**91.78**	**5.95**	**99.75**	**91.88**	**5.95**	**99.76**	**97.50**	**100.00**	**23.15**	**54.01**	**94.29**	**98.62**	**54.81**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/1/2020	8/7/2020	5	5	
2	Grading	Grading	8/8/2020	8/19/2020	5	8	
3	Building Construction	Building Construction	9/15/2020	8/2/2021	5	230	
4	Paving	Paving	8/20/2020	9/14/2020	5	18	
5	Architectural Coating	Architectural Coating	9/30/2020	8/17/2021	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.71

Acres of Paving: 0

Residential Indoor: 119,718; Residential Outdoor: 39,906; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

East Beamer - Permanent Facilities - Yolo/Solano AQMD Air District, Winter

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

Trips and VMT

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
Site Preparation	7	18.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	183.00	27.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

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	0.0931	0.0684	0.6091	1.9300e-003	24.0358	1.3500e-003	24.0371	2.4309	1.2400e-003	2.4321		192.6372	192.6372	4.7300e-003		192.7556
Total	**0.0931**	**0.0684**	**0.6091**	**1.9300e-003**	**24.0358**	**1.3500e-003**	**24.0371**	**2.4309**	**1.2400e-003**	**2.4321**		**192.6372**	**192.6372**	**4.7300e-003**		**192.7556**

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	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

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	0.0931	0.0684	0.6091	1.9300e-003	0.1946	1.3500e-003	0.1959	0.0518	1.2400e-003	0.0531		192.6372	192.6372	4.7300e-003		192.7556
Total	**0.0931**	**0.0684**	**0.6091**	**1.9300e-003**	**0.1946**	**1.3500e-003**	**0.1959**	**0.0518**	**1.2400e-003**	**0.0531**		**192.6372**	**192.6372**	**4.7300e-003**		**192.7556**

3.3 Grading - 2020

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					7.1767	0.0000	7.1767	3.4349	0.0000	3.4349			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**7.1767**	**1.2734**	**8.4501**	**3.4349**	**1.1716**	**4.6065**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.3 Grading - 2020

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	0.0776	0.0570	0.5076	1.6100e-003	20.0298	1.1200e-003	20.0309	2.0257	1.0300e-003	2.0268		160.5310	160.5310	3.9400e-003		160.6296
Total	**0.0776**	**0.0570**	**0.5076**	**1.6100e-003**	**20.0298**	**1.1200e-003**	**20.0309**	**2.0257**	**1.0300e-003**	**2.0268**		**160.5310**	**160.5310**	**3.9400e-003**		**160.6296**

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					7.1767	0.0000	7.1767	3.4349	0.0000	3.4349			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**7.1767**	**1.2734**	**8.4501**	**3.4349**	**1.1716**	**4.6065**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.3 Grading - 2020

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	0.0776	0.0570	0.5076	1.6100e-003	0.1622	1.1200e-003	0.1633	0.0432	1.0300e-003	0.0442		160.5310	160.5310	3.9400e-003		160.6296
Total	**0.0776**	**0.0570**	**0.5076**	**1.6100e-003**	**0.1622**	**1.1200e-003**	**0.1633**	**0.0432**	**1.0300e-003**	**0.0442**		**160.5310**	**160.5310**	**3.9400e-003**		**160.6296**

3.4 Building Construction - 2020

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

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	0.1148	3.4306	0.7513	9.0200e-003	21.6726	0.0172	21.6898	2.2036	0.0164	2.2200		943.4479	943.4479	0.0531		944.7756
Worker	0.9465	0.6950	6.1925	0.0197	244.3638	0.0137	244.3775	24.7138	0.0126	24.7264		1,958.4784	1,958.4784	0.0481		1,959.6814
Total	**1.0612**	**4.1256**	**6.9437**	**0.0287**	**266.0364**	**0.0308**	**266.0672**	**26.9174**	**0.0290**	**26.9464**		**2,901.9263**	**2,901.9263**	**0.1012**		**2,904.4570**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

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	0.1148	3.4306	0.7513	9.0200e-003	0.2155	0.0172	0.2327	0.0624	0.0164	0.0789		943.4479	943.4479	0.0531		944.7756
Worker	0.9465	0.6950	6.1925	0.0197	1.9783	0.0137	1.9920	0.5268	0.0126	0.5394		1,958.4784	1,958.4784	0.0481		1,959.6814
Total	**1.0612**	**4.1256**	**6.9437**	**0.0287**	**2.1939**	**0.0308**	**2.2247**	**0.5892**	**0.0290**	**0.6183**		**2,901.9263**	**2,901.9263**	**0.1012**		**2,904.4570**

3.4 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
Total	**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**

3.4 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	0.0951	3.1254	0.6565	8.9300e-003	21.6726	8.4400e-003	21.6810	2.2036	8.0800e-003	2.2117		934.7499	934.7499	0.0505		936.0134
Worker	0.8804	0.6216	5.6453	0.0190	244.3638	0.0133	244.3771	24.7138	0.0122	24.7260		1,890.0380	1,890.0380	0.0430		1,891.1134
Total	**0.9755**	**3.7471**	**6.3018**	**0.0279**	**266.0364**	**0.0217**	**266.0581**	**26.9174**	**0.0203**	**26.9377**		**2,824.7879**	**2,824.7879**	**0.0936**		**2,827.1268**

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
Total	**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**

3.4 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	0.0951	3.1254	0.6565	8.9300e-003	0.2155	8.4400e-003	0.2240	0.0624	8.0800e-003	0.0705		934.7499	934.7499	0.0505		936.0134
Worker	0.8804	0.6216	5.6453	0.0190	1.9783	0.0133	1.9916	0.5268	0.0122	0.5391		1,890.0380	1,890.0380	0.0430		1,891.1134
Total	**0.9755**	**3.7471**	**6.3018**	**0.0279**	**2.1939**	**0.0217**	**2.2156**	**0.5892**	**0.0203**	**0.6096**		**2,824.7879**	**2,824.7879**	**0.0936**		**2,827.1268**

3.5 Paving - 2020

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1837**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**		**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.5 Paving - 2020

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	0.1034	0.0760	0.6768	2.1500e-003	26.7064	1.4900e-003	26.7079	2.7010	1.3800e-003	2.7023		214.0414	214.0414	5.2600e-003		214.1728
Total	**0.1034**	**0.0760**	**0.6768**	**2.1500e-003**	**26.7064**	**1.4900e-003**	**26.7079**	**2.7010**	**1.3800e-003**	**2.7023**		**214.0414**	**214.0414**	**5.2600e-003**		**214.1728**

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1837**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**	**0.0000**	**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.5 Paving - 2020

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	0.1034	0.0760	0.6768	2.1500e-003	0.2162	1.4900e-003	0.2177	0.0576	1.3800e-003	0.0590		214.0414	214.0414	5.2600e-003		214.1728
Total	**0.1034**	**0.0760**	**0.6768**	**2.1500e-003**	**0.2162**	**1.4900e-003**	**0.2177**	**0.0576**	**1.3800e-003**	**0.0590**		**214.0414**	**214.0414**	**5.2600e-003**		**214.1728**

3.6 Architectural Coating - 2020

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	3.2168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**3.4590**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

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	0.1914	0.1405	1.2520	3.9700e-003	49.4069	2.7700e-003	49.4097	4.9968	2.5500e-003	4.9993		395.9765	395.9765	9.7300e-003		396.2197
Total	**0.1914**	**0.1405**	**1.2520**	**3.9700e-003**	**49.4069**	**2.7700e-003**	**49.4097**	**4.9968**	**2.5500e-003**	**4.9993**		**395.9765**	**395.9765**	**9.7300e-003**		**396.2197**

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	3.2168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**3.4590**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

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	0.1914	0.1405	1.2520	3.9700e-003	0.4000	2.7700e-003	0.4028	0.1065	2.5500e-003	0.1091		395.9765	395.9765	9.7300e-003		396.2197
Total	**0.1914**	**0.1405**	**1.2520**	**3.9700e-003**	**0.4000**	**2.7700e-003**	**0.4028**	**0.1065**	**2.5500e-003**	**0.1091**		**395.9765**	**395.9765**	**9.7300e-003**		**396.2197**

3.6 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	3.2168					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
Total	**3.4357**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 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	0.1780	0.1257	1.1414	3.8300e-003	49.4069	2.6900e-003	49.4096	4.9968	2.4700e-003	4.9993		382.1388	382.1388	8.7000e-003		382.3563
Total	**0.1780**	**0.1257**	**1.1414**	**3.8300e-003**	**49.4069**	**2.6900e-003**	**49.4096**	**4.9968**	**2.4700e-003**	**4.9993**		**382.1388**	**382.1388**	**8.7000e-003**		**382.3563**

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	3.2168					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
Total	**3.4357**	**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**

3.6 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	0.1780	0.1257	1.1414	3.8300e-003	0.4000	2.6900e-003	0.4027	0.1065	2.4700e-003	0.1090		382.1388	382.1388	8.7000e-003		382.3563
Total	**0.1780**	**0.1257**	**1.1414**	**3.8300e-003**	**0.4000**	**2.6900e-003**	**0.4027**	**0.1065**	**2.4700e-003**	**0.1090**		**382.1388**	**382.1388**	**8.7000e-003**		**382.3563**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	2.1558	16.9232	26.9625	0.1116	8.6169	0.0964	8.7134	2.3132	0.0906	2.4038		11,363.1455	11,363.1455	0.5462		11,376.8015
Unmitigated	2.2234	17.4959	28.2608	0.1181	9.1621	0.1018	9.2639	2.4595	0.0957	2.5553		12,021.7278	12,021.7278	0.5661		12,035.8810

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	659.00	716.00	607.00	2,479,314	2,331,795
Congregate Care (Assisted Living)	421.96	338.80	375.76	1,516,344	1,426,121
Total	1,080.96	1,054.80	982.76	3,995,658	3,757,916

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Apartments Low Rise	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3
Congregate Care (Assisted	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day					
NaturalGas Mitigated	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208
NaturalGas Unmitigated	0.0557	0.4762	0.2026	3.0400e-003		0.0385	0.0385		0.0385	0.0385		607.9083	607.9083	0.0117	0.0111	611.5208

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					
Apartments Low Rise	1948.08	0.0210	0.1795	0.0764	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1864	229.1864	4.3900e-003	4.2000e-003	230.5483
Congregate Care (Assisted Living)	3219.14	0.0347	0.2967	0.1262	1.8900e-003		0.0240	0.0240		0.0240	0.0240		378.7219	378.7219	7.2600e-003	6.9400e-003	380.9724
Total		**0.0557**	**0.4762**	**0.2026**	**3.0400e-003**		**0.0385**	**0.0385**		**0.0385**	**0.0385**		**607.9083**	**607.9083**	**0.0117**	**0.0111**	**611.5208**

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					
Apartments Low Rise	1.94808	0.0210	0.1795	0.0764	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1864	229.1864	4.3900e-003	4.2000e-003	230.5483
Congregate Care (Assisted Living)	3.21914	0.0347	0.2967	0.1262	1.8900e-003		0.0240	0.0240		0.0240	0.0240		378.7219	378.7219	7.2600e-003	6.9400e-003	380.9724
Total		**0.0557**	**0.4762**	**0.2026**	**3.0400e-003**		**0.0385**	**0.0385**		**0.0385**	**0.0385**		**607.9083**	**607.9083**	**0.0117**	**0.0111**	**611.5208**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	2.1015	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159	0.0000	37.7323	37.7323	0.0364	0.0000	38.6424
Unmitigated	577.7595	10.3959	732.6903	1.2867		99.9193	99.9193		99.9193	99.9193	10,485.4540	2,996.0852	13,481.5393	9.8359	0.7955	13,964.5042

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	0.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2652					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	575.6580	10.1539	711.7124	1.2856		99.8034	99.8034		99.8034	99.8034	10,485.4540	2,958.3529	13,443.8070	9.7995	0.7955	13,925.8618
Landscaping	0.6336	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159		37.7323	37.7323	0.0364		38.6424
Total	**577.7595**	**10.3959**	**732.6903**	**1.2867**		**99.9193**	**99.9193**		**99.9193**	**99.9193**	**10,485.4540**	**2,996.0852**	**13,481.5393**	**9.8359**	**0.7955**	**13,964.5042**

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	0.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2652					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	0.6336	0.2419	20.9779	1.1100e-003		0.1159	0.1159		0.1159	0.1159		37.7323	37.7323	0.0364		38.6424
Total	**2.1015**	**0.2419**	**20.9779**	**1.1100e-003**		**0.1159**	**0.1159**		**0.1159**	**0.1159**	**0.0000**	**37.7323**	**37.7323**	**0.0364**	**0.0000**	**38.6424**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

East Beamer - Permanent Facilities

Yolo/Solano 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
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
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	11	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	2	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	2.59500E-002	1.80850E-001	2.09480E-001	3.40000E-004	1.13900E-002	1.13900E-002	0.00000E+000	2.93624E+001	2.93624E+001	2.09000E-003	0.00000E+000	2.94147E+001
Cement and Mortar Mixers	7.90000E-004	4.97000E-003	4.16000E-003	1.00000E-005	1.90000E-004	1.90000E-004	0.00000E+000	6.18670E-001	6.18670E-001	6.00000E-005	0.00000E+000	6.20280E-001
Cranes	4.29300E-002	5.06470E-001	2.04050E-001	5.80000E-004	2.06800E-002	1.90200E-002	0.00000E+000	5.10063E+001	5.10063E+001	1.65000E-002	0.00000E+000	5.14187E+001
Excavators	9.80000E-004	9.65000E-003	1.30700E-002	2.00000E-005	4.70000E-004	4.30000E-004	0.00000E+000	1.81480E+000	1.81480E+000	5.90000E-004	0.00000E+000	1.82947E+000
Forklifts	4.63400E-002	4.20650E-001	4.04360E-001	5.30000E-004	3.03900E-002	2.79600E-002	0.00000E+000	4.63305E+001	4.63305E+001	1.49800E-002	0.00000E+000	4.67051E+001
Generator Sets	4.27300E-002	3.76290E-001	4.24550E-001	7.60000E-004	2.04000E-002	2.04000E-002	0.00000E+000	6.49989E+001	6.49989E+001	3.43000E-003	0.00000E+000	6.50847E+001
Graders	1.90000E-003	2.53000E-002	7.26000E-003	3.00000E-005	8.10000E-004	7.40000E-004	0.00000E+000	2.33226E+000	2.33226E+000	7.50000E-004	0.00000E+000	2.35112E+000
Pavers	2.36000E-003	2.52900E-002	2.60800E-002	4.00000E-005	1.23000E-003	1.13000E-003	0.00000E+000	3.71714E+000	3.71714E+000	1.20000E-003	0.00000E+000	3.74720E+000
Paving Equipment	2.80000E-003	2.89100E-002	3.42100E-002	6.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	4.83178E+000	4.83178E+000	1.56000E-003	0.00000E+000	4.87085E+000
Rollers	2.81000E-003	2.81000E-002	2.55600E-002	4.00000E-005	1.79000E-003	1.65000E-003	0.00000E+000	3.11155E+000	3.11155E+000	1.01000E-003	0.00000E+000	3.13671E+000
Rubber Tired Dozers	1.24100E-002	1.30320E-001	4.75100E-002	1.00000E-004	6.38000E-003	5.87000E-003	0.00000E+000	8.63135E+000	8.63135E+000	2.79000E-003	0.00000E+000	8.70114E+000
Tractors/Loaders/ Backhoes	6.53000E-002	6.58990E-001	7.54970E-001	1.03000E-003	4.00500E-002	3.68500E-002	0.00000E+000	9.08496E+001	9.08496E+001	2.93800E-002	0.00000E+000	9.15842E+001
Welders	3.63400E-002	1.75960E-001	1.99540E-001	2.90000E-004	9.02000E-003	9.02000E-003	0.00000E+000	2.16454E+001	2.16454E+001	2.95000E-003	0.00000E+000	2.17191E+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	2.59500E-002	1.80850E-001	2.09480E-001	3.40000E-004	1.13900E-002	1.13900E-002	0.00000E+000	2.93624E+001	2.93624E+001	2.09000E-003	0.00000E+000	2.94146E+001
Cement and Mortar Mixers	7.90000E-004	4.97000E-003	4.16000E-003	1.00000E-005	1.90000E-004	1.90000E-004	0.00000E+000	6.18670E-001	6.18670E-001	6.00000E-005	0.00000E+000	6.20280E-001
Cranes	4.29300E-002	5.06470E-001	2.04050E-001	5.80000E-004	2.06800E-002	1.90200E-002	0.00000E+000	5.10062E+001	5.10062E+001	1.65000E-002	0.00000E+000	5.14187E+001
Excavators	9.80000E-004	9.65000E-003	1.30700E-002	2.00000E-005	4.70000E-004	4.30000E-004	0.00000E+000	1.81480E+000	1.81480E+000	5.90000E-004	0.00000E+000	1.82947E+000
Forklifts	4.63400E-002	4.20650E-001	4.04360E-001	5.30000E-004	3.03900E-002	2.79600E-002	0.00000E+000	4.63305E+001	4.63305E+001	1.49800E-002	0.00000E+000	4.67051E+001
Generator Sets	4.27300E-002	3.76290E-001	4.24550E-001	7.60000E-004	2.04000E-002	2.04000E-002	0.00000E+000	6.49988E+001	6.49988E+001	3.43000E-003	0.00000E+000	6.50846E+001
Graders	1.90000E-003	2.53000E-002	7.26000E-003	3.00000E-005	8.10000E-004	7.40000E-004	0.00000E+000	2.33226E+000	2.33226E+000	7.50000E-004	0.00000E+000	2.35111E+000
Pavers	2.36000E-003	2.52900E-002	2.60800E-002	4.00000E-005	1.23000E-003	1.13000E-003	0.00000E+000	3.71714E+000	3.71714E+000	1.20000E-003	0.00000E+000	3.74719E+000
Paving Equipment	2.80000E-003	2.89100E-002	3.42100E-002	6.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	4.83178E+000	4.83178E+000	1.56000E-003	0.00000E+000	4.87085E+000
Rollers	2.81000E-003	2.81000E-002	2.55600E-002	4.00000E-005	1.79000E-003	1.65000E-003	0.00000E+000	3.11155E+000	3.11155E+000	1.01000E-003	0.00000E+000	3.13670E+000
Rubber Tired Dozers	1.24100E-002	1.30320E-001	4.75100E-002	1.00000E-004	6.38000E-003	5.87000E-003	0.00000E+000	8.63134E+000	8.63134E+000	2.79000E-003	0.00000E+000	8.70113E+000
Tractors/Loaders/Backhoes	6.53000E-002	6.58990E-001	7.54970E-001	1.03000E-003	4.00500E-002	3.68500E-002	0.00000E+000	9.08495E+001	9.08495E+001	2.93800E-002	0.00000E+000	9.15841E+001
Welders	3.63400E-002	1.75960E-001	1.99540E-001	2.90000E-004	9.02000E-003	9.02000E-003	0.00000E+000	2.16454E+001	2.16454E+001	2.95000E-003	0.00000E+000	2.17190E+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	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.36229E-006	1.36229E-006	0.00000E+000	0.00000E+000	1.01990E-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
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17633E-006	1.17633E-006	0.00000E+000	0.00000E+000	1.16689E-006
Excavators	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
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07920E-006	1.07920E-006	0.00000E+000	0.00000E+000	1.28466E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23079E-006	1.23079E-006	0.00000E+000	0.00000E+000	1.22917E-006
Graders	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	4.25329E-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	2.66866E-006
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	3.18805E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15857E-006	1.15857E-006	0.00000E+000	0.00000E+000	1.14927E-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	1.21079E-006	1.21079E-006	0.00000E+000	0.00000E+000	1.20108E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.23985E-007	9.23985E-007	0.00000E+000	0.00000E+000	9.20850E-007

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				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	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	4.83	0.49	0.04	0.01	0.99	0.98
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	26.01	2.64	0.24	0.07	0.99	0.98
Grading	Fugitive Dust	0.03	0.01	0.03	0.01	0.00	0.00
Grading	Roads	0.07	0.01	0.00	0.00	0.99	0.98
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.20	0.02	0.00	0.00	0.99	0.98
Site Preparation	Fugitive Dust	0.05	0.02	0.05	0.02	0.00	0.00
Site Preparation	Roads	0.05	0.01	0.00	0.00	0.99	0.97

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	0.00	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	0.00	0.00	0.00	0.00	0.00
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	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	2.93	3.19	4.82	5.47	5.36	5.40	0.00	5.45	5.45	3.65	0.00	5.45
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.21	0.10		
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	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	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
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

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		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Appendix B

Biological Resources Assessment

Biological Resources Assessment of the City of Woodland's East Beamer Street at County 102 Parcel

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December 26, 2018

Introduction

Background

The City of Woodland (City) is evaluating future uses of its 128.8-acre parcel (APN 027-360-010) (parcel) located at the northwest corner of County Road 102 and East Beamer Street. The parcel functioned as the City's wastewater treatment facility since the 1950s before the construction of the Water Pollution Control Facility in the mid-1980s. Since decommissioning, the parcel has remained mostly idle with minimal alteration of the water treatment ponds and the berms and levees that separate them. Currently, most of the parcel functions as stormwater retention basins, although some materials storage occurs in the southeast corner of the parcel. An 8.5-acre area in the far southeast corner of the parcel is currently under consideration by the City for a permanent supportive housing development project.

Location and Setting

The parcel is located adjacent to the northeastern boundary of the Woodland City Limits in Yolo County (Figure 1). The parcel is bordered on the south by East Beamer Street, on the east by County Road 102, and on the north by Kentucky Avenue (Figure 2). Although contiguous with industrial development to the west and southeast, neighboring lands to the north, east, and south remain in active agriculture. Other than the urbanized lands within the City to the west and southwest, the surrounding landscape is also primarily agricultural. The proposed supportive housing development project is located in the far southeastern corner of the parcel bordered by County Road 102 on the east and East Beamer Street on the south (Figure 2).

Project Description

The supportive housing development is currently the only project under consideration within the parcel boundary. The project site includes approximately 8.5 acres, 5 acres of which would be used to construct up to 36 closely-spaced micro residential units and related facilities. With access off of East Beamer Street, the project would include parking areas, walkways, an open plaza, a garden area, and a bus turnout along the north side of East Beamer Street. There are no immediate plans of the remainder of the parcel.

Objectives

This biological resources assessment was prepared to provide the City with a summary of biological resources, including the occurrence or potential for occurrence of special-status species, throughout the 128.8-acre parcel; and to provide an assessment of potential biological resource impacts resulting from development of the 8.5-acre supportive housing development project, along with recommendations to minimize or avoid significant impacts that can be referenced by or integrated into a California Environmental Quality Act (CEQA) document.



Figure 1
Location of City of Woodland Parcel and Proposed Supportive Housing Project



NORTH

0 500 1,000

MILES

Figure 2
City of Woodland Parcel and Proposed Supportive Housing Project Site

Regulatory Framework

Several state and federal laws and regulations are relevant to the proposed project. Each is briefly described below.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented.

During the CEQA review process, environmental impacts are assessed and a significance determination provided based on pre-established thresholds of significance. Thresholds are established using guidance from CEQA, particularly Appendix G of the State CEQA guidelines and CEQA Section 15065 (Mandatory Findings of Significance). CEQA guidance is then refined or defined based on further direction from the lead agency.

Consistent with Appendix G of the State CEQA guidelines, a biological resource impact is considered significant (before considering offsetting mitigation measures) if the lead agency determines that project implementation would result in one or more of the following:

- Substantial adverse effects, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife (CDFW) or US Fish and Wildlife Service (USFWS);
    - A substantial adverse effect on a special-status wildlife species is typically defined as one that would:
        - Reduce the known distribution of a species,
        - Reduce the local or regional population of a species,
        - Increase predation of a species leading to population reduction,
        - Reduce habitat availability sufficient to affect potential reproduction, or
        - Reduce habitat availability sufficient to constrain the distribution of a species and not allow for natural changes in distributional patterns over time.
- Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or interference with the use of native wildlife nursery sites.
    - Substantial interference with resident wildlife movement is typically defined as obstructions that prevent or limit wildlife access to key habitats, such as water sources or foraging habitats, or obstructions that prohibit access through key movement corridors considered important for wildlife to meet needs for food, water, reproduction, and local dispersal.

- Substantial interference with migratory wildlife movement is typically defined as obstructions that prevent or limit regional wildlife movement through the project area to meet requirements for migration, dispersal, and gene flow that exceed the defined baseline condition.

Consistent with CEQA Section 15065 (Mandatory Findings of Significance), a biological resource impact is considered significant if the project has 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 an endangered, rare or threatened species.

CEQA defines the significance of an impact on a state-listed species based on the following:

- Appendix G of the State CEQA guidelines states that a biological resource impact is considered significant (before considering offsetting mitigation measures) if the lead agency determines that project implementation would result in "substantial adverse effects, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFG or USFWS"; and
- CEQA Section 15065 (Mandatory Findings of Significance), a biological resource impact is considered significant if the project has the potential to "substantially reduce the number or restrict the range of an endangered, rare or threatened species".

Yolo Habitat Conservation Plan/Natural Communities Conservation Plan

The Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (Yolo HCP/NCCP) is a comprehensive, county-wide plan to provide for the conservation of state and federally listed and other sensitive species and the natural communities and agricultural land on which they depend, as well as a streamlined permitting process to address the effects of a range of future anticipated activities on covered species. The Yolo Habitat Conservancy (Conservancy), which consists of Yolo County and the incorporated cities of Davis, West Sacramento, Winters, and Woodland, developed the Yolo HCP/NCCP, which provides the basis for issuance of long-term permits under the Federal Endangered Species Act (FESA) and California Natural Community Conservation Planning Act (NCCPA) that cover an array of public and private activities, including activities that are essential to the ongoing viability of Yolo County's agricultural and urban economies. Specifically, the Yolo HCP/NCCP provides the Permittees (i.e., Yolo County, the four incorporated cities, and the Conservancy) with incidental take permits from both the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) for the 12 sensitive species covered by the plan. This action is pursuant to Section 10(a)(1)(B) of the FESA and Section 2835 of the NCCPA chapter of the California Fish and Game Code (Fish & Game Code). The Yolo

HCP/NCCP ensures compliance with the FESA, NCCPA, and the California Endangered Species Act (CESA) for covered activities that may affect the covered species.

California Fish and Game Code 3503.5 (Birds of Prey)

Section 3503.5 of the Fish and Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs. The California Department of Fish and Wildlife may issue permits authorizing take pursuant to CESA.

Woodland General Plan

The Woodland General Plan includes several policies directed toward the protection of natural resources. Those most relevant to the proposed project include the following:

- Policy 7.B.1 Habitat Conservation Plan/Natural Community Conservation Plan. Continue to participate in the planning process for the countywide Habitat Conservation Plan/Natural Community Conservation Plan. Once adopted, fully implement the Plan to mitigate the impacts of growth projected under the General Plan on plant and wildlife habitats in the Woodland area.
- Policy 7.B.2 Sensitive Habitat Types. Support and cooperate with efforts of other local, State, and Federal agencies and private entities engaged in the preservation and protection of sensitive habitat types from incompatible land uses and development. Sensitive habitat types include alkali sink, freshwater wetlands, freshwater marsh, riparian forest, drainages, riverine habitat, and lakes.
- Policy 7.B.3 Special-Status Species. Support preservation of the habitats of Federally- or State-listed rare, threatened, endangered, and/or other special status species. Encourage Federal and State agencies, as well as other resource conservation organizations, to acquire and manage endangered species' habitats.
- Policy 7.B.4 Fish and Wildlife. Support the management efforts of the California Department of Fish and Wildlife to maintain and enhance the productivity of important wildlife species by protecting identified critical habitat for these species from incompatible suburban, rural residential, or recreational development.
- Policy 7.B.5 Open Space for Conservation. Where appropriate, permanently protect as open space areas of natural resource value, including sensitive habitat types (e.g. alkali sink and prairie, freshwater wetlands, freshwater marsh, riparian forest, drainages).
- Policy 7.B.11 Sensitive Site Planning. Site new development to maximize the protection of native tree species and special-status plant and wildlife habitats.

Yolo County General Plan

Because the City-owned parcel is located outside of the city limits in Yolo County, the Yolo County General Plan is also relevant to this assessment. The Yolo County General Plan includes numerous policies regulating and emphasizing the protection of natural resources. Those most relevant to the proposed project include the following:

- Policy CO-2.1. Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.
- Policy CO-2.3. Preserve and enhance those biological communities that contribute to the county's rich biodiversity including blue oak and mixed oak woodlands, native grassland prairies, wetlands, riparian areas, aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.
- Policy CO-2.38. Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds).
- Policy CO-2.41. Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements.
- Policy CO-2.42. Projects that would impact Swainson's hawk foraging habitat shall participate in the Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo County entered into by the CDFG and the Yolo County HIP/NCCP Joint Powers Agency, or satisfy other subsequent adopted mitigation requirements consistent with applicable local, State, and federal requirements.

Methods

Pre-Survey Investigation

Prior to conducting the site visit, available information regarding biological resources on or near the project site was gathered and reviewed. Sources included:

- California Natural Diversity Data Base (2018);
- Woodland General Plan 2035 (Dyett & Bhatia 2017)
- Yolo County General Plan (Yolo County 2009);
- Yolo County HCP/NCCP (www.yolohabitatconservancy.org/);
- eBird (online database of bird observations) (https://ebird.org/home);
- Tricolored blackbird portal (https://tricolor.ice.ucdavis.edu/).
- Estep 2008 (Distribution, Abundance, and Habitat Associations of the Swainson's Hawk in Yolo County);
- Other local research, surveys, and environmental documents

Aerial photographs and land use/vegetation maps of the project site and surrounding area were also reviewed.

Field Survey and Assessment

A survey and site assessment of the project area was conducted on December 20, 2018 from approximately 0800 to 1700 hours. The survey was conducted walking meandering transects in all accessible areas – and walking berms and levees where available throughout the 128.8-acre

parcel. Land uses, natural communities, and wildlife habitats were inspected, mapped, and photographed; wildlife species occurrences were recorded using binoculars and spotting scope, and occurrences and potential habitat for each special-status species was documented.

Results

General Characteristics

Physiography

Located in the interior agricultural region of Yolo County, the parcel is generally flat, with elevation ranging from 29 to 47 feet above mean sea level with elevational differences primarily a function of the lower interior and higher berms and levees of the former wastewater treatment ponds. The former treatment ponds generally divide the parcel into four quadrants, with a portion of the southeastern quadrant further divided into four smaller cells (Figure 3). There are otherwise no discernable topographic features. The climate in the vicinity of the project site is mild with average annual maximum temperature of 74.6 degrees Fahrenheit and average annual minimum temperature of 47.6 degrees Fahrenheit, with winter rains and dry summers, and an average annual rainfall of approximately 20 inches.

Land Use

Currently, the parcel is mostly idle land. A review of historic aerial photos suggest that this site has been idle since the construction of the City's Water Pollution Control Facility in the mid-1980s. Much of the area appears to be regularly disked presumably to control vegetation height and density (Plate 1). Portions of the southeastern quadrant are also used to deposit and store material waste, such as soil, concrete, and cattail marsh vegetation (removed from the perimeter water conveyance canals to maintain flows) (Plate 2). The northeast and southwest quadrants are large, shallow basins with a perimeter levee (Plates 3 and 4, Figure 3). The northwest quadrant is also a large basin; however, it currently receives stormwater runoff and was entirely inundated at the time of the survey. It appears that the three large basins – northwest, northeast, and southwest quadrants, are used primarily for stormwater detention on an as-needed basis, with the northeast quadrant serving as the initial and primary site for this need. The vegetation in the northwest quadrant suggests it is regularly inundated compared with the remainder of the parcel (Plate 5, Figure 3). No other current or historic (since its use as a water treatment facility) land uses were evident.



NORTH

0 500 1,000

MILES

Figure 3
Land Use and Land Cover Types



Plate 1. Looking northeast from the southern boundary of the parcel. Like most of the parcel, this area is periodically disked to control the height and density of the grass/ruderal vegetation.



Plate 2. Looking northeast toward a former water treatment pond in the southeast quadrant of the parcel. Note the use as storage of excavated soils.



Plate 3. Looking north-northwest toward the northeast quadrant of the parcel. This area is idle and periodically disked to control grass and ruderal vegetation height and density.



Plate 4. Looking southeast from the western boundary of the parcel toward the southwest quadrant. This area is idle and periodically disked to control grass and ruderal vegetation height and density.



Plate 5. Looking north toward the northwest quadrant from the levee separating the northwest from the southwest quadrant. This area is more frequently used for storm water retention.

Biological Communities and Wildlife Use

Grassland/Ruderal

The majority of the parcel, with the exception of the northwest quadrant, consists of nonnative annual grasses and agricultural weeds (Figure 3). At the time of the survey the vegetation height was 4 to 6 inches throughout most of the area, indicating the site had been disked relatively recently (Plates 1, 3, and 4). Ruderal vegetation formed a narrow band around the perimeter of the former treatment ponds. Consisting of a variety of species, including bull thistle (*Cirsium vulgare*), yellow star-thistle (*Centaurea solstitialis*), and mustard (*Brassica* sp), ruderal vegetation occurs in dense, narrow rows along the inside perimeter slope of the berms and levees that surround the former treatment ponds, around the perimeter of the parcel, and on soils or other waste material that had been deposited (Plate 6).



Plate 6. Looking west from near the eastern boundary along a weedy berm that drops in elevation to the north (right) into the northeast quadrant.



Plate 7. Ruderal edge looking east toward County Road 102 along the northern edge of the southeast quadrant.



Plate 8. Looking south along the eastern ruderal edge of the southwest quadrant.

Prior to its use as water treatment facility, the parcel was most likely farmed similar to the surrounding farmlands. Prior to agricultural conversion, the parcel was part of a large expanse of alkali seasonal wetlands and grassland prairies unique to this lowland area of Yolo County that supported several species closely associated with this now-rare natural community. Relatively undisturbed remnants of the unique natural community currently remain southeast of the City, some of which is now protected and managed as alkali sink preserves. The historic agricultural use, the more recent use as a water treatment facility, and the current management of periodic disking and inundation has likely eliminated vegetation associations with alkali sink natural community, including species unique to this community.

Wildlife use of the ruderal/grassland community is similar to that found throughout the agricultural landscape of Yolo County. These large, open habitats provide nesting and foraging habitat for a variety of species. Raptors, including red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), and great-horned owl (*Bubo virginianus*) are commonly observed in these habitats. They also provide important habitat for other common bird species. Among those observed during the survey include Common Raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), American pipit (*Anthus rubescens*), mourning dove (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*), cliff swallow (*Petrochelidon pyrrhonota*), and Brewer's blackbird (*Euphagus cyanocephalus*). If sufficiently large and contiguous with other open grassland or agricultural habitat, several mammals, including coyote, striped skunk, racoon, opossum, black-tailed jackrabbit (*Lepus californicus*), and California ground squirrel (*Otospermophilus beecheyi*); and reptiles, including gopher snake, terrestrial garter snake, and fence lizard, are also commonly encountered.

The large, open grassland habitats on the parcel are used extensively by foraging raptors and other birds and mammals. Red-tailed hawk, northern harrier, and American kestrel were also observed foraging in the grassland habitats during the survey. The grassland habitats support a variety of rodent species, most importantly California meadow vole (*Microtus californicus*), an essential prey species for many Central Valley raptors. Other important species, including California ground squirrel and black-tailed jackrabbit were also observed frequently during the field survey throughout the grasslands and ruderal berms. The ruderal edges are used by many species for cover and nesting/denning. California ground squirrels were abundant along the berms and levees, particularly in the southeast quadrant of the parcel. A coyote (*Canis latrans*) den was found on a ruderal berm and two northern harriers were flushed from the cover of a ruderal berm. Golden crowned sparrow (*Zonotrichia atricapilla*), American goldfinch (*Spinus tristis*), mourning dove, European starling (*Sturnus vulgaris*) and several other common birds were observed along the ruderal berms during the survey.

Wetlands, Ponds, Water Conveyance Channels

The large basin in the northwest quadrant is periodically inundated and has developed a mixture of dense ruderal, grass, and wetland vegetation (Plate 9). Although dormant during the survey, cattails (*Typha* sp.) occur in the shallower portions of the cell. Several patches of willow trees (*Salix* sp.) have also developed and two cottonwood trees (*Populus fremontii*) occur within the basin (Plate 10).



Plate 9. Looking northward into the northwest quadrant and the mixture of wetland-weedy vegetation that has developed from periodic inundation.



Plate 10. Looking northeast in the northwest quadrant. Note the cottonwood tree in the foreground and willow trees in the background.

Depending on how frequently the area is undated, the flooded basin in the northwest quadrant may be more accurately referred to as a managed seasonal wetland. It's likely that the area is dry during the warmer summer months and is periodically flooded during the rainy season. These communities can provide breeding habitat for resident wildlife and provide seasonal wetland habitat for migrating and wintering species. Species observed in this area during the survey include Yellow-rumped warbler (*Setophaga coronata*), white-crowned sparrow (*Zonotrichia leucophrys*), Brewer's blackbird (*Euphagus cyanocephalus*, red-winged blackbird (*Agelaius phoeniceus*), mourning dove, collared dove (*Streptopelia decaocto*), Ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*) and Says phoebe (*Sayornis saya*). The dense cover in this area may also provide important cover habitat for many other birds, mammals, and reptiles.

The perimeter water conveyance channels that border the northern and western edges of the parcel also contained flowing water during the surveys (Plates 11 and 12). These areas also support patches of wetland vegetation and adjacent ruderal vegetation along their banks, and wetland-associated wildlife species such as red-winged blackbird. However, to maintain flow conditions, these channels are periodically cleared of vegetation, particularly dense cattail marsh (Plate 13).



Plate 11. Looking west along the water conveyance canal paralleling Kentucky Avenue at the northern boundary of the parcel.



Plate 12. Looking north along the perimeter water conveyance canal at the western boundary of the parcel.



Plate 13. Looking south along the levee adjacent to the water conveyance canal at the western boundary of the parcel. Note the cattails that have been removed from the canal to maintain water flows.

Trees and Shrubs

In addition to the willow and cottonwood trees in the northwest quadrant, the only other onsite trees are several olive trees between the northeast and southeast quadrants along County Road 102 (Plate 14, Figure 3). There are no other trees or shrubs on the parcel.



Plate 14. Looking north along the eastern boundary of the Parcel toward small group of olive trees. Other than two cottonwood trees and few patches of small willow trees in the northwest quadrant, these are the only trees on the parcel.

Proposed Housing Development Project Site

The 8.5-acre proposed housing development site supports land uses, biological communities, and plant and wildlife associations similar to that described for the entire 128.8-acre parcel. The area consists of periodically disked grassland/weedy areas divided by two east-west oriented berms with the same ruderal vegetation as described above (Plates 15 and 16, Figure 4). The perimeter of the site along the edges of East Beamer Street and County Road 102 also consist of similar ruderal vegetation. The northern edge of the 8.5-acre development site extends into two of the small former wastewater basins (Plate 17). The only unique feature in the 8.5-acre area is the presence of a 290-foot by 55-foot east-west oriented berm that is the result of depositing spoils material onsite (Plates 18 and 19, Figure 4). The pile is approximately 60 feet north of East Beamer Road and consists of soil, rocks, and other debris with sparse weedy vegetation.



Plate 15. Looking east toward the intersection of East Beamer Street and County Road 102 from the southwest corner of the proposed housing development site. East Beamer Road is on the right side of the photo. The ruderal vegetation on the lower right is at the entrance to the parcel.



Figure 4
Proposed Housing Development Site
Land Use and Land Cover Types



Plate 16. Looking east between two narrow berms within the proposed housing development project site.



Plate 17. Looking west along the northern edge of the proposed 8.5-acre project site. The project boundary will extend into two of the small basins (right), both of which consist of similar grass and ruderal vegetation typical to the rest of the parcel.



Plate 18. Looking west along the spoils pile placed near the south of the project site near East Beamer Street.



Plate 19. Looking east from the eastern end of the spoils pile toward the intersection of East Beamer Street and County Road 102.

Special-status Species

Special-status species are generally defined as species that are assigned a status designation indicating possible risk to the species. These designations are assigned by state and federal resource agencies (e.g., California Department of Fish and Wildlife [CDFW], U.S. Fish and Wildlife Service) or by private research or conservation groups (e.g., National Audubon Society, California Native Plant Society). Assignment to a special-status designation is usually done on the basis of a declining or potentially declining population, either locally, regionally, or nationally. The extent to which a species or population is at risk usually determines the status designation. The factors that determine risk to a species or population generally fall into one of several categories, such as habitat loss or modification affecting the distribution and abundance of a species; environmental contaminants affecting the reproductive potential of a species; or a variety of mortality factors such as hunting or fishing, interference with man-made objects (e.g., collision, electrocution, etc.), invasive species, or toxins.

For purposes of this biological assessment, special-status species are defined as follows:

- Species that are listed, proposed, or candidates for listing under the federal Endangered Species Act (50 CFR 17.11 – listed; 61 FR 7591, February 28, 1996 - candidates);
- Species that are listed or proposed for listing under the California Endangered Species Act (Fish and Game Code 1992 Sections 2050 et seq.; 14 CCR Sections 670.1 et seq.);
- Species that are designated as Species of Special Concern by CDFW;
- Species that are designated as Fully Protected by CDFW (Fish and Game Code, Section 3511, 4700, 5050, and 5515;
- Species included on Lists 1B or 2 by the California Native Plant Society;
- Species that meet the definition of rare or endangered under CEQA (14 CCR Section 15380).

The CNDDB records search encompasses a much larger area than the parcel and does not address the presence/absence of suitable habitat within the parcel. Instead, it is used as initial guidance to indicate the species that have been observed or have the potential to occur within the general area of the parcel and to focus the next step in the assessment, habitat availability. Potential for species to occur is then based on the presence/absence of suitable habitat on or in the vicinity of the parcel. Finally, specific surveys within suitable habitat determines the actual presence/absence of potentially occurring species. If CNDDB reports onsite occurrences, they are reported here. However, because surveys for this report were conducted during the winter non-breeding season, only non-breeding occurrences of special-status species were detected and reported during the survey.

Table 1 lists the special-status species with potential to occur in the vicinity of the parcel based existing information on their local and regional distribution and species lists provided by CDFW's CNDDB and other sources. The table also describes habitat associations; the presence/absence of suitable habitat; and whether or not the species has been reported from the

parcel or observed during the field survey. Figure 5 illustrates the location of reported special-status species occurrences in the vicinity of the parcel for each potentially-occurring species. Each species in Table 1 is described in more detail below including habitat associations, the presence/absence of suitable habitat, reported occurrences, and a determination of the potential for occurrence in the vicinity of the project area.

Table 1. Special-status species with potential to occur in the vicinity of the project area.

Species	Status State/ Federal	Habitat Association	Habitat Present on the Project Site	Observed Onsite During Survey	Reported Occurrence on the Project Site
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	-/T	Elderberry shrubs	No	No	No
Vernal pool fairy shrimp *Branchinecta lynchi*	-/T	Vernal pools	No	No	No
Vernal pool tadpole shrimp *Lepidurus packardi*	-/E	Vernal pools	No	No	No
Western pond turtle *Actinemys marmorata*	CSC/-	Streams, ponds, canals	No	No	No
Giant garter snake *Thamnophis gigas*	E/E	Emergent wetland, canals, rice fields	No	No	No
California tiger salamander *Ambystoma californiense*	T/T	Vernal pools and ponds in grassland	No	No	No
Northern harrier *Circus cyaneus*	CSC/-	Grasslands, pastures, fields, seasonal wetland	No	Yes	No
White-tailed kite *Elanus leucurus*	FP/-	Nests in trees, hunts in grassland/farmland/wetland	Yes	No	No
Swainson's hawk *Buteo swainsoni*	T/-	Nests in trees, hunts in grassland and farmlands	Yes	Yes	Yes
Mountain plover *Charadrius montanus*	CSC/-	Short grassland, plowed fields	Yes	No	Yes
Western snowy plover *Charadrius alexandrinus*	CSC/-	Shores of alkaline and saline lakes, reservoirs, wastewater and evaporation ponds	No	No	Yes
Black tern *Chlidonias niger*	CSC/-	Lakes, ponds, marshes, and flooded ag fields	No	No	No
Burrowing owl *Athene cunicularia*	CSC/-	Grasslands, field edges with ground squirrel activity	Yes	Yes	No
Short-eared owl *Asio flammeus*	CSC/-	Grasslands, prairies, marshes	No	No	No
Loggerhead shrike *Lanius ludovicianus*	CSC/-	Grasslands, agricultural areas	Yes	No	No
Tricolored blackbird *Agelaius tricolor*	T/-	Marsh, bramble, silage, grassland, pastures	Yes	No	No
Palid bat *Antrozous pallidus*	CSC/-	Grasslands, shrub lands, woodlands.	No	No	No
Townsends big-eared bat *Corynorhinus townsendii*	CSC/-	Caves, bridges, buildings	No	No	No
Western red bat *Lasiurus blossevillii*	CSC/-	Riparian woodland fruit orchards	No	No	No
California alkali grass *Puccinellia simplex*	1B/-	Alkali grasslands	No	No	No
Ferris' milk-vetch *Astragalus tener var. ferrisiae*	1B/-	Valley grassland/wetlands/riparian	No	No	No

Species	Status State/ Federal	Habitat Association	Habitat Present on the Project Site	Observed Onsite During Survey	Reported Occurrence on the Project Site
alkali milkvetch *Astragalus tener var. tener*	1B/-	Alkali grasslands	No	No	No
Heartscale *Atriplex cordulata var. cordulata*	1B/-	Alkali grasslands	No	No	No
Brittlescale *Atriplex depressa*	1B/-	Alkali grasslands	No	No	Yes
San Joaquin spearscale *Extriplex joaquinana*	1B/-	Alkali grasslands	No	No	Yes
Heckard's peppergrass *Lepidium latipes var. heckardii*	1B/-	Alkali grasslands	No	No	No
Palmate-bracted bird's beak *Chloropyron palmatum*	1B-E/E	Alkali grasslands	No	No	Yes
Saline clover *Trifolium hydrophilum*	1B/-	Alkali grasslands	No	No	No

T=threatened; E=Endangered; CSC=California species of species concern; FP=state fully protected; 1B=CNPS rare plant rank

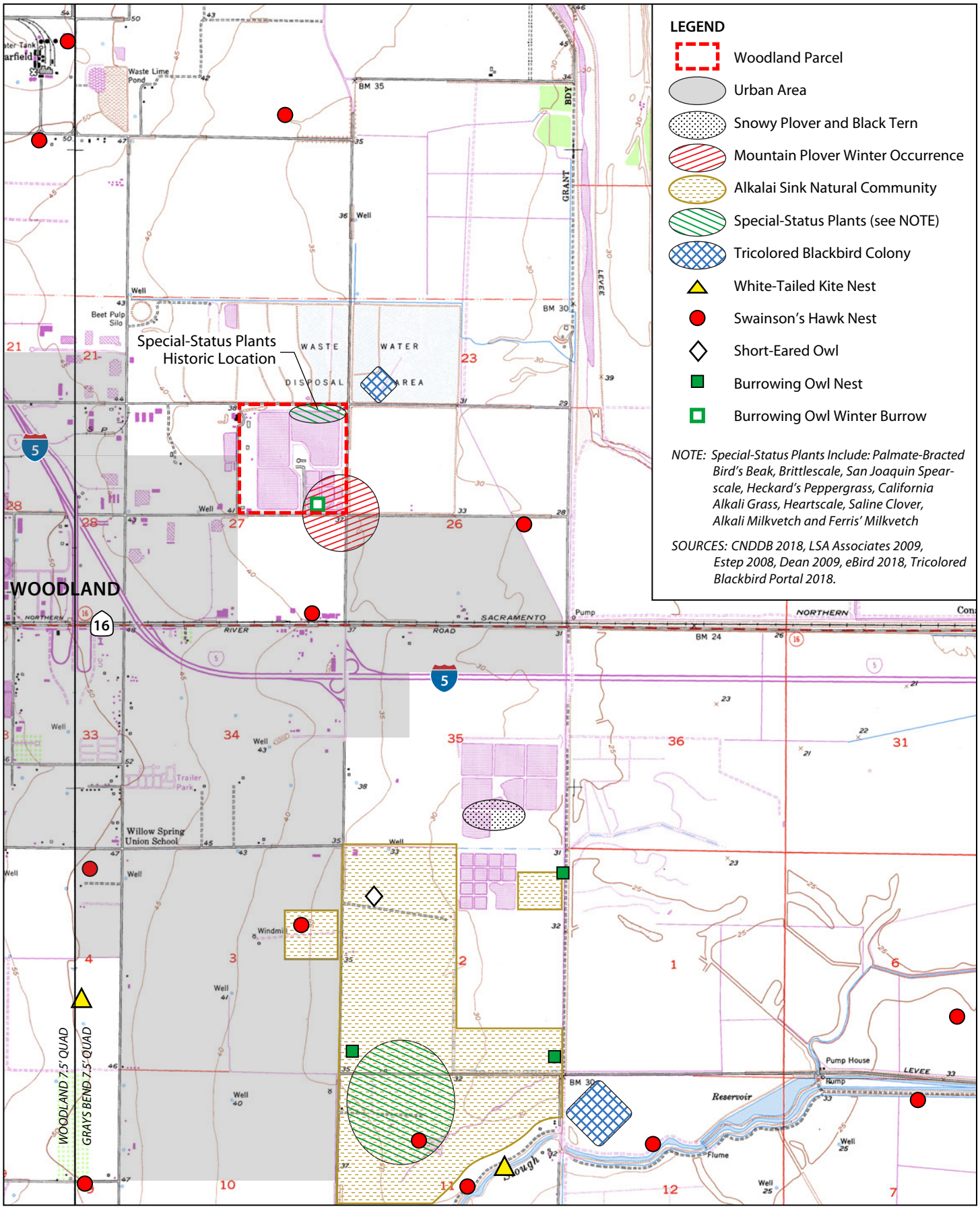
Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*) is a federally-listed medium-sized woodboring beetle, about 0.8 inches long. Endemic to California's Central Valley and watersheds that drain into the Central Valley, this species' presence is entirely dependent on the presence of its host plant, the elderberry shrub (*Sambucus* spp.). Elderberry grows in upland riparian forests or savannas adjacent to riparian vegetation, but also occurs in oak woodlands and savannas and in disturbed areas. It usually co-occurs with other woody riparian plants, including valley oak, Fremont cottonwood, various willows, and other riparian trees and shrubs (Barr 1991, Collinge et al 2001, U.S. Fish and Wildlife Service 2017).

VELB is rarely observed, but suitable elderberry shrubs are common throughout much of Yolo County, occurring in riparian and upland habitats including the edges of agricultural fields. However, no elderberry shrubs were found on or adjacent to the parcel. There are no elderberry shrubs on or in the vicinity of the proposed 8.5-acre development site.

Vernal Pool Fairy Shrimp/Vernal Pool Tadpole Shrimp

Vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*) are federally-listed aquatic invertebrate species endemic to vernal pool habitats. There are no vernal pools on the parcel or in the vicinity of the parcel. The nearest vernal pool habitats and reported occurrences of these species are approximately 12 miles southwest of the parcel on the DQ University property north of CR31 and 1 mile east of CR92E (CNDDB 2018). Other occurrences are in the vicinity of Winters and in the southern panhandle of Yolo County. There is no habitat for vernal pool fairy shrimp or vernal pool tadpole shrimp on or in the vicinity of the proposed 8.5-acre development site.



BASE MAP: USGS 7.5'-Series Woodland (1952, Photorevised 1981) and Grays Bend (1953, Photorevised 1968 and 1975), California Quadrangles.

NORTH 0 0.25 0.5 1 MILES

Figure 5
Location of Special-Status Species Occurrences in the Vicinity of the City of Woodland Parcel APN 027-310-010

Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is a species of special concern that is found in permanent water bodies, such as lakes, ponds, slow moving streams, and water conveyance channels that include basking habitat (down logs, rocks) and that support sufficient aquatic prey. They also require adjacent or nearby upland habitat that is suitable for building nests, to aestivate, and to overwinter (Jennings and Hayes 1994). The water conveyance channels bordering the northern and western edges of the parcel and the inundated northwest quadrant of the parcel could potentially provide sufficient aquatic and upland habitat to support western pond turtle. However, it is unlikely that these features provide sufficient year-round aquatic habitat, in which case the species would be unlikely to occur.

The nearest reported occurrence is 6 miles northeast of the parcel along the Old River channel near the Fremont Weir Wildlife Area (CNDDB 2018). Other suitable aquatic habitat occurs along the Knights Landing Ridge Cut and the Tule Canal, 4 to 5 miles east and northeast of the parcel. There is no habitat for western pond turtle on or in the vicinity of the proposed 8.5-acre development site.

Giant Garter Snake

The giant garter snake (*Thamnophis gigas*) is a state and federally listed threatened species. Giant garter snake is an aquatic species endemic to the Central Valley. Described as among California's most aquatic garter snakes, giant garter snakes are associated with low-gradient streams and valley floor wetlands and marshes, and have adapted successfully to rice agriculture (Hansen 1986). Giant garter snakes occur in sloughs, creeks, and other watercourses including agricultural ditches that support sufficient water, aquatic prey, and emergent vegetation for basking sites. The nearest reported occurrences are from the vicinity of the Conaway Ranch within the northern Yolo Bypass, approximately 3 miles east of the parcel. The species is known to in wetland, flooded rice, and permanent water conveyance channel habitats within the Yolo Bypass, Colusa Basin, and in wetland and rice-growing areas just west of the Yolo Bypass in the vicinity of the Davis Wetlands and west of the Main Conaway Canal, south of Interstate 5 within the area designated as the Willow Slough/Yolo Bypass subpopulation, one of 13 extant populations between Butte County and Fresno County (U.S. Fish and Wildlife Service 1999) (CNDDB 2018).

Although marginally suitable habitat occurs along some permanent water conveyance channels, the species has not been reported in the interior of Yolo County, including the vicinity of the parcel. The nearest reported occurrence is approximately 2.6 miles east of the parcel (CNDDB 2018). Although the water conveyance channels along the north and west boundaries of the parcel could potentially provide suitable movement habitat for giant garter snakes, the lack of permanent water flows and the periodic removal of aquatic vegetation from these channels reduces opportunities for occurrence. There is no habitat for giant garter snake on or in the immediate vicinity of the proposed 8.5-acre development site.

California Tiger Salamander

California tiger salamander (*Ambystoma californiense*) is a state and federally listed threatened species restricted to grasslands, oak savannah, and coastal scrub communities of lowlands and foothill regions where aquatic sites are available for breeding. Breeding sites generally consist of natural ephemeral pools (Barry and Shaffer 1994) or artificial ponds that mimic them (e.g., stock ponds that are allowed to dry). Most reported populations breed exclusively in seasonal and perennial stock ponds. Suitable habitat for this species does not occur on or in the vicinity of the parcel.

There are few occurrence records of this species in Yolo County, but most are from the northern Dunnigan Hills, approximately 20 miles northeast of the project area. These occurrences are from within an area that now comprises the Dunnigan Creek Unit (Central Valley Region Unit 1) of designated critical habitat. There is no habitat for California tiger salamander on or in the vicinity of the proposed 8.5-acre development site.

Northern harrier

The northern harrier is a state species of special concern that nests on the ground in grassland, seasonal marsh, and some cultivated habitats. The species is frequently observed throughout most of Yolo County; however, there are relatively few reported nest sites. The nearest reported nest site in CNDDB (2018) is approximately 6 miles south of the parcel. eBird reports numerous sightings of the species in the vicinity of the parcel, including sightings at the parcel, but does not report confirmed breeding sites. The cultivated habitats adjacent to the parcel also support suitable nesting and foraging habitat for harriers and suitable foraging habitat.

The parcel supports suitable nesting and foraging habitat for northern harriers. Suitable nesting habitat occurs primarily in the ruderal edges of the former wastewater treatment basins and in the seasonal wetland habitats within the northwest quadrant. Two northern harriers were observed within the proposed 8.5-acre development site during the field survey. The entire area is considered suitable foraging habitat for this species and the ruderal/weedy edges provide suitable nesting habitat.

Swainson's Hawk

The Swainson's hawk is a medium-sized raptor associated with generally flat, open landscapes. In the Central Valley it nests in mature native and nonnative trees and forages in grassland and agricultural habitats. Although a state-threatened species, the Swainson's hawk is relatively common in Yolo County during the spring-summer breeding season due to the availability of nest trees and the agricultural crop patterns that are compatible with Swainson's hawk foraging. The species migrates out of the Central Valley during the fall-winter non-breeding season and therefore could not be detected during the site survey. However, the parcel is within an area that is surveyed for this species annually. Over 300 nest sites have been documented in Yolo County, at least 25 of which are within 5 miles of the parcel (Estep 2008, 2018 surveys, CNDDB 2018), the nearest of which is approximately 0.5 miles south of the parcel (Figure 5).

The species has not been reported nesting on or immediately adjacent to the parcel. The parcel provides limited nesting opportunities for Swainson's hawk. There are only two suitable nest trees on the parcel, one along the eastern edge near County Road 102 and one in the northwest quadrant. However, the majority of the parcel is considered suitable foraging habitat. There are no potential Swainson's hawk nest trees within or immediately adjacent to the proposed 8.5-acre development site. However, the entire area is considered suitable foraging habitat for this species.

White-tailed kite

The white-tailed kite is a highly specialized and distinctively-marked raptor associated with open grassland and seasonal wetland landscapes. It typically nests in riparian forests, woodlands, woodlots, and occasionally in isolated trees, primarily willow, valley oak, cottonwood, and walnut) and some nonnative trees. It forages in grassland, seasonal wetland, and agricultural lands, but is more limited in its use of cultivated habitats compared with the Swainson's hawk. As a result, the species occurs throughout most of Yolo County, but in low breeding densities (Dunk 1995, Erichsen 1995, Estep 2008).

No white-tailed kites were detected during the survey and no nests have been reported from on for in the immediate vicinity of the parcel. The nearest reported nest is approximately 2.5 miles south of the parcel along County Road 101 (Estep 2008) (Figure 5). e-Bird reports several occurrences in the area, including one from the northwest quadrant of the parcel; however, no active nests. There is limited nesting habitat available on the parcel for this species, including the small group of trees along the edge of County Road 102, and the few cottonwood and willow trees in the northwest quadrant. But the entire parcel is considered suitable foraging habitat for this species. There are no potential white-tailed kite nest trees within or immediately adjacent to the proposed 8.5-acre development site. However, the entire area is considered suitable foraging habitat for this species.

Mountain Plover

The mountain plover (*Charadrius montanus*), a state species of special concern, was formerly an occasional winter visitor to a specific area of Yolo County, but reported occurrences have declined sharply in at least the last decade. The species arrives on its wintering grounds in California from November through December where it remains through March. During winter, the species roosts and forages in short grass prairies, pastureland, grazed grasslands, and occasionally – as with most of the reported occurrences in Yolo County – in disked agricultural fields (Manolis and Tangren 1975, Hunting et al. 2001, Hunting and Edson 2008). Small flocks had been observed in recently-plowed agricultural fields near Woodland and Davis, especially along County Roads 16, 25, 27, and 102 and in unflooded portions of the Yolo Bypass. CNDDB (2018) reports one onsite occurrence from 1970, along with more recent records within several miles of the parcel from the 1990s and 2000s (Figure 5). The most recent reports in CNDDB (2018) are from 2009 within 3 to 4 miles north of the parcel in the vicinity of County Roads 16 and 17 at County Road 102. eBird reports a 2012 record just west of this location. All records since the 1990s have been from north of Cache Creek.

Although no onsite occurrences have been reported since 1970, the close proximity of more recent sightings and the general suitability of disked grassland/ruderal habitat on the parcel suggests there is continued potential for occurrence on the parcel when the vegetation height and density is consistent with habitat requirements. While not expected to occur, the disked grassland/ruderal habitat on the parcel and in the proposed 8.5-acre development site represents suitable winter habitat for the mountain plover.

Western Snowy Plover

The inland population of western snowy plover (*Charadrius alexandrinus nivosus*), a state species of special concern, is associated with sparsely vegetated flats, shores of alkaline and saline ponds, lakes, and reservoirs, and the edges of wastewater and evaporation ponds (Shuford et al. 2008). During the breeding season in Yolo County, most occurrences have been reported from the Yolo Bypass, the Davis Water Treatment Plant, and the Woodland Water Pollution Control Facility (WPCF). However, CNDDB also reports a 1970 breeding occurrence from the parcel when it was still operating as the City's wastewater treatment facility (Figure 5). There have been no other reports from the parcel. eBird reports the nearest occurrence as recently as 2015 from the Woodland WPCF, about 1.6 miles southeast of the parcel.

Since it was abandoned as a wastewater treatment facility, the increased extent and density of vegetation throughout the parcel has likely contributed to the current unsuitable habitat conditions for snowy plover, and the lack of reported occurrences. It is unlikely the species currently occurs onsite, including on or in the vicinity of the proposed 8.5-acre development site.

Black Tern

The black tern (*Chlidonias niger*) is a state species of special concern that occurs primarily in marshland habitats. However, in more recent years the species has been found nesting in rice fields, irrigated pastures, and in other altered habitats including water treatment facilities, where small fish and other aquatic organism are available for food (Shuford et al. 2008). CNDDB (2018) reports no onsite occurrences of this species for Yolo County; however, eBird reports several recent occurrences in the Yolo Bypass, the Davis Water Treatment Facility, and at the Woodland WPCF. eBird also reports occurrences from the 1970s and 1980s from the Woodland Sugar Ponds; none, however, from the parcel. Although it may have historically provided suitable habitat conditions, the northwest quadrant is likely too densely vegetated to support habitat for black tern. Currently, there is no suitable habitat for black tern on the parcel, including the proposed 8.5-acre development site.

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia*) occurs in open, dry grasslands, agricultural and range lands, and desert habitats. In the Central Valley, they are associated with remaining grassland habitats, pasturelands, and edges of agricultural fields. They also occur in vacant lots and remnant grassland or ruderal habitats within urbanizing areas. Historically nesting in larger colonies, due to limited nesting habitat availability most of the more recent occurrences are individual nesting pairs or several loosely associated nesting pairs. The burrowing owl is a

subterranean-nesting species, typically occupying the burrows created by California ground squirrels. They also occupy artificial habitats, such as those created by rock piles and occasionally in open pipes and small culverts. They forage for small rodents and insects in grassland and some agricultural habitats with low vegetative height. Key to burrowing owl occupancy are grassland or ruderal conditions that maintain very short vegetative height around potential nesting burrows (Gervais et al. 2008). In Yolo County, burrowing owls occur mainly in the grassland and pasture habitats of the southern panhandle and in cultivated and ruderal habitats in the Davis area. Nesting and wintering occurrences have also been reported from the area immediately north of Winters, in the Dunnigan Hills, and elsewhere in the grassland foothills along the west side of the valley. Occasional occurrences are reported from the lowland interior of the county. Neither CNDDB or eBird report any breeding or wintering occurrences in the immediate vicinity of the parcel. The nearest reported location is approximately 2 miles southeast of the 8.5-acre project site (Figure 5).

With the exception of the northwest quadrant, the parcel represents suitable habitat for the burrowing owl. Most of the grassland/ruderal areas are considered suitable for foraging, and where ground squirrels are present, potential burrow habitat also occurs. During the field survey, a burrowing owl was detected in the spoils pile within the proposed 8.5-acre development site (Figure 5). The owl was using a hole at the base of the spoils pile as a winter burrow (Plate 20). The proposed 8-acre development site supports abundant ground squirrels and potential burrow habitat for breeding and wintering burrowing owls.



Plate 20. Location of occupied burrowing owl winter burrow along the spoils pile within the proposed 8.5-acre development site. The owl can be seen (note the yellow eye) looking out from the burrow in the center of the photo.

Short-eared Owl

The short-eared owl (*Asio flammeus*) is a state species of special concern that occurs mainly in open grassland, seasonal wetland, and freshwater marsh habitats. A ground-nesting species, it has been reported to nest in Yolo County, including in the Yolo Basin and near the Yolo County landfill, but reported occurrences have declined sharply in the last couple of decades. Most historic occurrences were from the grassland/pasturelands and wetlands in the vicinity of the Yolo County landfill. Although CNDDB (2018) reports no occurrences in Yolo County, eBird reports numerous occurrences from the 1980s to present, mostly southeast of Woodland, the nearest of which is a 2013 record from approximately 2 miles south of the parcel. Because the parcel is periodically disked, it is unlikely that short-eared owls would nest onsite. They are less inclined to use small patches of nesting cover similar to northern harriers. However, the species could use the parcel, including the proposed 8.5-acre development site for foraging.

Loggerhead Shrike

The loggerhead shrike occurs in open habitats with scattered trees, shrubs, posts, fences, utility lines, or other perches. It nests in small trees and shrubs and forages for small rodents, reptiles, and insects in pastures and agricultural lands. An underreported species in CNDDB, no records are available for Yolo County (CNDDB 2018). However, eBird reports numerous incidental records throughout the county. The grassland and oak savannah foothills along the western edge of the valley are thought to be the highest value habitat for this species; but some cultivated landscapes may also provide suitable conditions for nesting and foraging.

No loggerhead shrikes were detected during the survey and no nests have been reported from the project area or immediate vicinity (CNDDB 2018, eBird 2018). However, eBird reports several recent incidental occurrences, including from the northeastern corner of the parcel. The species is more likely to be incidentally observed foraging in the cultivated habitats surrounding the parcel. There are few nesting opportunities on the around the parcel. The proposed 8.5-acre development site does not support nesting habitat for this species, but the grassland/ruderal areas provide suitable foraging habitat.

Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) is a state-listed threatened species that nests in colonies from several dozen to several thousand breeding pairs. They have three basic requirements for selecting their breeding colony sites: open accessible water; a protected nesting substrate, including either flooded or thorny or spiny vegetation; and a suitable foraging space providing adequate insect prey within a few miles of the nesting colony (Beedy and Hamilton 1999). Nesting colonies are found in freshwater emergent marshes, in willows, blackberry bramble, thistles, or nettles, and in silage and grain fields (Beedy and Hamilton 1999). Recently reported tricolored blackbird colonies in Yolo County include a site on the Conaway Ranch in eastern Yolo County 2.8 miles southeast of the parcel, and at locations in the Yolo Bypass and along the western edge of the valley (CNDDB 2018). There are no recently reported breeding colonies in the vicinity of the project area; however, eBird reports numerous incidental non-breeding or foraging occurrences throughout the interior of the county. The Tricolored

Blackbird Portal reports an ephemeral colony at the intersection of County Road 102 and Kentucky Avenue in 2010. A review of the portal data indicates that the colony, which was estimated at 3,000 individuals, was northeast of the intersection. The field was idle and weedy and by the following year was again under cultivation, and thus 2010 was the only year the site was reported active.

Although there are no records of occurrence, the northwest quadrant may provide suitable breeding habitat for tricolored blackbirds, and the grassland/ruderal vegetation throughout the rest of the parcel is considered suitable foraging habitat for the species. There is no tricolored blackbird breeding habitat on or in the immediate vicinity of the proposed 8.5-acre development site; however, the grassland/ruderal habitat is considered suitable for foraging.

Special-status Bats

Three special status bats potentially occur in the vicinity of the project site, including pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii townsendii*), and western red bat (*Lasiurus blossevillii*), all state species of special concern. Pallid bat occurs primarily in shrublands, woodlands, and forested habitats, but also can forage in grasslands and agricultural areas. Townsends's big-eared bat occurs in a variety of woodland and open habitats, including agricultural areas. Western red bat occurs in wooded habitats, including riparian and fruit orchards, and grasslands. Pallid bat and Townsend's big-eared bat roost in mines, caves, rocky crevices, large hollow trees, and occasionally in large open buildings that are usually abandoned or infrequently inhabited. Western red bat usually roosts in large trees (Pierson and Rainey 1998, Pierson 1998, Fellers and Pierson 2002, Pierson et al. 2006).

None of these species have been reported from the vicinity of the project area. Most reported occurrences are from the foothills and high elevation areas of western Yolo County (CNDDB 2018). There are no trees or other potential roosting habitat for these species on the parcel. However, each could potentially hunt for insects above the parcel.

Special-status Plants

Eight Category 1B special-status plants including California alkali grass (*Puccinellia simplex*), Ferris' milk-vetch (*Astragalus tener var. ferrisiae*), alkali milkvetch (*Astragalus tener var.tener*), heartscale (*Atriplex cordulata var. cordulata*), brittlescale (*Atriplex depressa*), San Joaquin spearscale (*Extriplex joaquinana*), Heckard's peppergrass (*Lepidium latipes var. heckardii*), and saline clover (*Trifolium hydrophilum*) and one state and federally endangered plant, Palmate-bracted bird's beak (*Chloropyron palmatum*) also have potential to occur in the vicinity of the parcel. Each of these species is associated with alkaline sink and alkali grassland natural communities. Reported occurrences are primarily from the remaining alkaline grassland habitats south and southeast of the parcel between CR24 south to Willow Slough and east to CR103 (including Woodland Regional Park), and from grassland habitats in the Yolo Bypass. However, CNDDB reports a 1963 occurrence of brittlescale, a 1965 occurrence of San Joaquin spearscale, and a 1952 occurrence of palmate bracted bird's beak from the north end of the parcel. All are

likely extirpated from the parcel due to removal of the alkali grassland habitat and continued periodic disking of the parcel.

Impacts of the Proposed Supportive Housing Development Project

Biological Communities

Grassland/Ruderal

The proposed project will remove approximately 8.5 acres of periodically disked annual grass and ruderal habitat. This relatively small area within the urban-agricultural interface of Woodland will not have a substantial adverse effect on biological resources. Because of the small number of acres and relatively low habitat value, the removal of 8.5 acres of annual grassland/ruderal habitat does not represent a significant impact pursuant to CEQA and would not be in conflict with any biological resources polices in the Woodland or Yolo County General Plans. Habitat removal would not affect resident or migratory wildlife movement, would not substantially degrade the quality of the environment or reduce the habitat of wildlife species, and would not cause wildlife populations to drop below self-sustaining levels.

Wetlands/Pond/Water Conveyance Channels

The proposed project will have no effect on wetlands or water conveyance channels. Two former wastewater treatment ponds that partially occur within the 8.5-acre development footprint will be filled; however, although they may occasionally become inundated during storm events, they do not support wetland habitats and do not provide essential aquatic functional values. As a result, the removal of these former wastewater ponds does not represent a significant impact pursuant to CEQA and would not be in conflict with any General Plan Policy.

Trees and Shrubs

There are no trees, shrubs, or other natural communities within or adjacent to the proposed 8.5-acre development site, and therefore there are no significant impacts on these resources.

Special-Status Species

Valley Elderberry Longhorn Beetle

There is no suitable habitat for VELB in or near the project site. Therefore, the project will not impact this species.

Vernal Pool Fairy Shrimp/Vernal Pool Tadpole Shrimp

There is no suitable habitat for vernal pool fairy shrimp or vernal pool tadpole shrimp in or near the project site. Therefore, the project will not impact these species.

Western Pond Turtle, Giant Garter Snake, California Tiger Salamander

There is no suitable habitat for these species in or near the project site. Therefore, the project will not impact these species.

Northern Harrier

The grassland/ruderal habitats on the project site represent suitable habitat for nesting and foraging northern harriers. The species is known to occur onsite and potentially nests in the ruderal strips. The removal of 8-acres of annual grassland/ruderal habitat does not represent a significant loss of foraging habitat for this species; however, inadvertent destruction of an active northern harrier nest, although not necessarily considered a significant biological impact pursuant to CEQA guidance, would be a violation of Fish and Game Code 3503.5 and would be in conflict with Yolo County General Plan Policy CO-2.38 (Avoid adverse impacts to wildlife movement corridors and nursery sites [e.g., nest sites, dens, spawning areas, breeding ponds]).

Swainson's Hawk and White-tailed Kite

The project site and immediate vicinity do not support suitable nesting habitat for Swainson's hawk or white-tailed kite. As a result, the project will have no impacts related to direct or indirect disturbance to active nests. However, the entire 8.5-acre project is considered suitable foraging habitat. Although the removal of 8.5 acres of annual grassland/ruderal habitat will not substantially reduce available foraging habitat for these species and would therefore not reach the level of significance pursuant to CEQA guidance, both species are Covered under the Yolo County HCP/NCCP, of which the City is a signatory, and both the City and Yolo County General Plan include policies to address impacts on these species within the framework of the HCP/NCCP.

Mountain Plover

Wintering mountain plovers could potentially occur on the 8.5-acre project site and elsewhere on the City's parcel if it is managed as disked grassland with limited vegetation or very short vegetative structure during the winter months. Removal of 8.5 acres will reduce the extent of potentially suitable winter habitat for this species in Yolo County; however due the small acreage and the lack of winter occurrences on or in the immediate vicinity of the project site for many years, this would not represent a significant impact pursuant to CEQA guidance and would not be in conflict with City or Yolo County General Plan policies.

Western Snowy Plover

Since the decommissioning of the water treatment facility on the City's parcel, the area has not supported suitable habitat for the western snowy plover and no occurrences have been reported since the 1970s. Removal of 8.5-acres of grassland/ruderal habitat from the proposed project site would not affect the current distribution or abundance of this species and does not represent a

significant impact to this species pursuant to CEQA guidance and would not be in conflict with City or Yolo County General Plan policies.

Black Tern

There is no suitable habitat for these species on or in the immediately vicinity of the project site and therefore removal of 8.5 acres of grassland/ruderal habitat does not represent a significant impact to this species pursuant to CEQA guidance and would not be in conflict with City or Yolo County General Plan policies.

Western Burrowing Owl

The grassland/ruderal habitats on the project site represent suitable habitat for nesting and foraging burrowing owls. The site is also currently occupied by a wintering burrowing owl. The removal of 8-acres of annual grassland/ruderal habitat does not represent a significant loss of foraging habitat for this species; however, removal of occupied habitat and the removal of an active winter burrow is considered a significant impact pursuant to CEQA guidance due to the species restricted range and declining populations.

The entire 8.5-acre project site is considered suitable habitat for the burrowing owl. The grassland/ruderal areas are suitable foraging habitat and the numerous ground squirrel burrows, particularly on the berms and levees, provide suitable nesting and wintering habitat for burrowing owls. The burrowing owl is a covered species under the Yolo County HCP/NCCP, of which the City is a signatory, and both the City and Yolo County General Plan include policies to address impacts on this species within the framework of the plan.

Short-eared Owl and Loggerhead Shrike

The entire 8.5-acre project site is considered suitable habitat for short-eared owl and loggerhead shrike. These species were not detected onsite during surveys and there are no records of these species nesting onsite or in the immediate vicinity of the project. The removal of 8.5 acres of grassland/ruderal habitat will not substantially reduce the extent of suitable habitat for these species in the region and would not meet the criteria for a significant impact pursuant to CEQA guidance or be in conflict with the City's or Yolo County General Plan policies.

Tricolored Blackbird

The 8.5-acre project site does not support breeding habitat for tricolored blackbirds. The nearest breeding colony is nearly 3 miles southeast of the project site. Tricolored blackbirds could use the grassland/ruderal habitat for foraging; however, removal of 8.5 acres would not substantially reduce available foraging habitat for tricolored blackbirds and would not be considered a significant impact pursuant to CEQA. There is also limited potential for breeding to occur in the seasonal wetland habitat in the northwest quadrant of the parcel within approximately 1,000 feet of the project site. Although the project would not directly affect this area, noise disturbances from construction could have indirect effects if a breeding colony were established. The tricolored blackbird is a covered species under the Yolo County HCP/NCCP, of which the City is

a signatory, and both the City and Yolo County General Plan include policies to address impacts on this species within the framework of the plan.

Special-status Bats

None of the potentially-occurring special-status bats have been reported from the project vicinity and no potential roosting habitat would be removed. Therefore, the project would not impact these species.

Special-status Plants

Although there are historic occurrences of three special-status plant species on the City's parcel, none are in the vicinity of the project site. The decommissioning of the wastewater treatment plant, use of the area for storm water detention, and the periodic disking of the grassland/ruderal areas has likely affected the suitability of the area for these species. None have been reported since the 1950s and 1960s. Therefore, the removal of 8.5 acres of grassland/ruderal habitat is not expected to impact these species. However, one of these species, the palmate-bracted bird's beak, is a covered species under the Yolo County HCP/NCCP, of which the City is a signatory, and both the City and Yolo County General Plan include policies to address impacts on this species within the framework of the regional plan.

Conclusions and Recommendations

Despite having been historically farmed, then developed as the site of the City's wastewater treatment facility, and finally, following decommissioning of the wastewater facility to function as a site for stormwater detention and to deposit and store materials, the 128.8-acre City-owned parcel continues to support important habitat for local and regional wildlife. Although consisting entirely of non-native grasses and agricultural weeds, the grassland/ruderal habitats provide habitat for a variety of terrestrial species. The seasonal wetland conditions in the northwest quadrant support seasonal aquatic habitats and cover vegetation. Several special-status species are known or have potential to occur on the parcel, including northern harrier, Swainson's hawk, white-tailed kite, western burrowing owl, loggerhead shrike, mountain plover, and tricolored blackbird. Palmate-bracted-birds beak, San Joaquin spearscale, and brittlescale are known to have historically occurred the parcel.

The loss of 8.5 acres of nonnative grassland/ruderal habitat on the southeast corner of the parcel would not substantially impact the wildlife use of the parcel or the potential for special-status plant occurrences. The removal of this small amount of nonnative vegetation is not considered a significant impact pursuant to CEQA guidance, and would not be inconsistent with the City's or Yolo County's General Plan policies.

With the exception of the western burrowing owl, impacts on special-status species are also not expected to reach the level of significance pursuant to CEQA guidance due to the small affected area and the relatively small potential impacts on populations. However, of the potentially-occurring species, five (including western burrowing owl) are also covered species in the Yolo

HCP/NCCP. Because the City of Woodland is permit-holder and a participant in the plan and because the proposed project is likely to be eligible for coverage under the plan, the avoidance and minimization measures (AMMs) in the HCP/NCCP should be implemented to address and further minimize potential impacts on these species. The following describes the relevant AMMs for each of the five species.

Palmate-bracted Bird's Beak

AMM11 in the Yolo HCP/NCCP addresses measures to minimize impacts on the palmate-bracted bird's beak, as follows:

> *AMM11, Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak. Palmate-bracted bird's-beak is covered by the Yolo HCP/NCCP only for the removal of suitable habitat and not for the removal of palmate-bracted bird's beak plants. This AMM ensures compliance with this provision. To determine if palmate-bracted bird's-beak is present and could be affected, the project proponent will conduct a planning-level survey for this species for any covered activities to be conducted within 250 feet of suitable habitat (as defined in Appendix A, Covered Species Accounts). The survey will be conducted during the period from May 31 to September 30 and will be consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (California Department of Fish and Game 2009). The project proponent will avoid occupied habitat where palmate-bracted bird's beak has been located within any of the last 15 years (seed viability could be as little as three years and as much as six years, as described in Appendix A, Section A.1.2, Species Description and Life History). The project proponent also will avoid any new occurrences of this species identified during planning-level surveys. Avoidance will require a 250-foot setback from the occupied habitat, or greater distance depending on site-specific topography to avoid hydrologic effects. A shorter buffer distance may apply if is determined to avoid effects and is approved by the Conservancy, USFWS, and CDFW. Mortality of palmate-bracted bird's beak individuals will be avoided, except as needed through management activities that provide an overall benefit to the species.*

Because habitat conditions on the project site and throughout the City's parcel are no longer considered suitable for this species (i.e., do not meet the definition of suitable habitat as defined in Appendix A, Covered Species Accounts), no other actions are recommended.

Swainson's hawk and White-tailed Kite

AMM16 in the Yolo HCP/NCCP addresses measures to minimize impacts on the Swainson's hawk and white-tailed kite, as follows:

> *AMM16, Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite. The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.*
>
> *If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days*

prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

Western Burrowing Owl

AMM16 in the Yolo HCP/NCCP addresses measures to minimize impacts on the burrowing owls, as follows:

AMM16, Minimize Take and Adverse Effects on Western Burrowing Owl. The project proponent will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A, Covered Species Accounts) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (Appendix L).

If burrowing owls are identified during the planning-level survey, the project proponent will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a nond-isturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this non-disturbance buffer could range from 150 to 1,500 feet (Table 4-2, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012). The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- *Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall*

under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.

- *Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.*

- *High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.*

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the project proponent will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines (Appendix L, Take Avoidance Surveys). The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.

If the biologist finds the site to be occupied by western burrowing owls during the breeding season (February 1 to August 31), the project proponent will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- *The Conservancy, CDFW, and USFWS approves the AMM plan provided by the project proponent.*

- *A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).*

- *The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.*

- *If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all*

construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.

- *If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the non-disturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.*

If evidence of western burrowing owl is detected outside the breeding season (September 1 to January 31), the project proponent will establish a non-disturbance buffer around occupied burrows, consistent with Table 4-2, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- *A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).*

- *The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.*

- *If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.*

- *If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed and construction may continue.*

Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.

A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season (Trulio 1995). Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, the project proponent will develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods will be designed as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques2. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow

to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.

Because surveys of the project site detected an occupied winter burrow, the non-breeding season element of the above AMM applies to the project. However, there is also potential for onsite breeding, so if work were to occur during the breeding season, additional surveys should be conducted to determine the presence/absence of breeding burrowing owls on or adjacent to the project site.

Tricolored Blackbird

AMM21 in the Yolo HCP/NCCP addresses measures to minimize impacts on the tricolored blackbird, as follows:

AMM21, Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird. The project proponent will retain a qualified biologist to identify and quantify (in acres) tricolored blackbird nesting and foraging habitat (as defined in Appendix A, Covered Species Accounts) within 1,300 feet of the footprint of the covered activity. If a 1,300-foot buffer from nesting habitat cannot be maintained, the qualified biologist will check records maintained by the Conservancy (which will include CNDDB data, and data from the tricolored blackbird portal) to determine if tricolored blackbird nesting colonies have been active in or within 1,300 feet of the project footprint during the previous five years. If there are no records of nesting tricolored blackbirds on the site, the qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).

Operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season (March 1 to July 30) do not need to conduct planning or construction surveys or implement any additional avoidance measures.
If an active tricolored blackbird colony is present or has been present within the last five years within the planning-level survey area, the project proponent will design the project to avoid adverse effects within 1,300 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW. If a shorter distance is approved, the project proponent will still maintain a 1,300-foot buffer around active nesting colonies during the nesting season but may apply the approved lesser distance outside the nesting season. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

The seasonal wetland area in the northwest quadrant of the City's parcel has limited potential for breeding tricolored blackbirds. Because the project site is within 1,000 feet of this area, a breeding season survey to determine presence or absence is warranted.

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Appendix C

Cultural Resources Study

Cultural Resources Study for the East Beamer Way Project Woodland, Yolo County, California

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October 22, 2019

Cultural Resources Study for the East Beamer Way Project Woodland, Yolo County, California

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October 22, 2019

ABSTRACT

Tom Origer & Associates conducted a cultural resources study for the East Beamer Way Project, Woodland, Yolo County, California. The study, requested and authorized by Raney Planning & Management, Inc., complies with Section 106 of the National Historic Preservation Act as required by the United States Department of Housing and Urban Development and with the California Environmental Quality Act as required by the City of Woodland.

The purpose of this report is to identify potential historic properties under Section 106 of the National Historic Preservation Act and historical resources other than Tribal Cultural Resources, as defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B) and discussed in the Regulatory Context section). Tribal Cultural Resources are defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B).

The City of Woodland is proposing to develop a 61-unit permanent supportive housing development to serve homeless individuals. The site will include an emergency homeless shelter and a substance abuse treatment facility.

This study included archival research at the Northwest Information Center, Sonoma State University, examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the Area of Potential Effects (APE). A wastewater water pond constructed between 1957 and 1968 is within the APE.

Synopsis

Project:	East Beamer Way
Location:	Northwest corner of intersection of East Beamer Street and County Road 102, Woodland, Yolo County
APN:	A portion of 027-360-010
Quadrangles:	Grays Bend 7.5' series
Study Type:	Intensive
Scope:	8.5 acres
Field Hours:	2 person-hours
NWIC #:	19-0610
TOA #:	2019-101
Finds:	Wastewater pond related to the Woodland Wastewater Treatment Facility

Key Personnel

Eileen Barrow
Mrs. Barrow conducted research, conducted the records search at the Northwest Information Center, conducted the fieldwork, and authored the report for this study. She has been with Tom Origer & Associates since 2005 and holds a Master of Arts in cultural resources management from Sonoma State University. Mrs. Barrow's experience includes work that has been completed in compliance with local ordinances, CEQA, NEPA, and Section 106 (NHPA) requirements. Her professional affiliations include the Society for American Archaeology, the Society for California Archaeology, the California Historical Society, the Sonoma County Historical Society, and the Western Obsidian Focus Group.

Vicki R. Beard
Ms. Beard conducted field work, examined field photos, and provided her architectural history expertise for this project. Ms. Beard has been with Tom Origer & Associates since 1990, and holds a Master of Arts in cultural resources management with an emphasis in historical resources, and meets the Secretary of the Interior's standards for archaeology, history, and architectural history. Graduate coursework and applied studies included building and structure evaluation, and historical research. Post-graduate work has been completed in historical architecture through the Architecture Department at the University of California Berkeley; heritage resource management at the University of Nevada, Reno; and architectural history and historic landscapes through the National Preservation Institute, Alexandria, Virginia. Professional affiliations include the Society of Architectural Historians, Northern California Chapter of the Society of Architectural Historians, and Vernacular Architecture Forum. She is also listed on the Register of Professional Archaeologists (#10634).

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INTRODUCTION

This report describes a cultural resources study for the East Beamer Way Project, Woodland, Yolo County, California. The study was requested and authorized by Raney Planning & Management, Inc. The City of Woodland has applied for federal funds to develop a 61-unit permanent supportive housing development to serve homelss individuals. The site will include an emergency homeless shelter and a substance abuse treatment facility within the Area of Potential Effects (APE); therefore this project is subject to Section 106 of the National Historic Preservation Act (Section 106) as required by the United States Department of Housing and Urban Development and the California Environmental Quality Act (CEQA) as required by the City of Woodland. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2019-101S).

REGULATORY CONTEXT

Under Section 106, when a federal agency is involved in an undertaking, it must take into account the effects of the undertaking on historic properties (36CFR Part 800). Compliance with Section 106 requires that agencies make an effort to identify historic properties that might be affected by a project.

The State of California requires that cultural resources be considered during the environmental review process. This process is outlined in CEQA and accomplished by an inventory of resources within a study area and by assessing the potential that historical resources could be affected by development. The term "Historical Resources" encompasses all forms of cultural resources including prehistoric and historical archaeological sites and built environment resources (e.g., buildings, bridges, canals), that would be eligible for inclusion on the California Register of Historical Resources (California Register). An additional category of resources is defined in CEQA under the term "Tribal Cultural

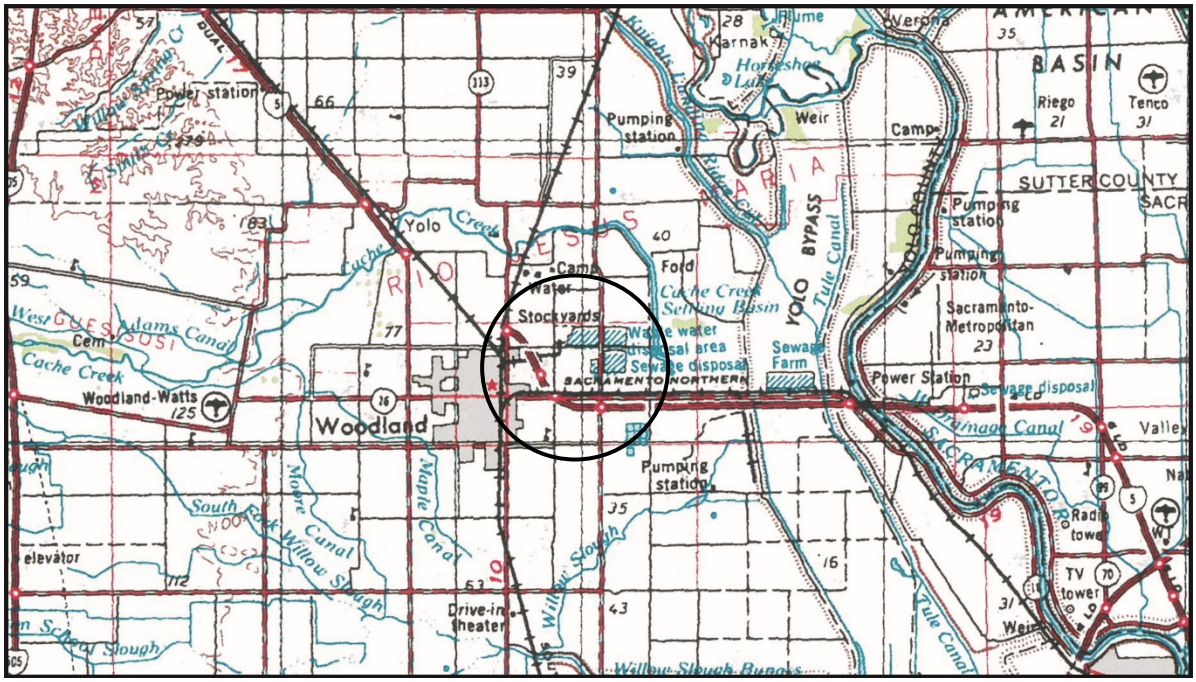


Figure 1. Project vicinity (adapted from the 1972 Sacramento 1:250,000-scale USGS maps).

Resources" (Public Resources Code Section 21074). They are not addressed in this report because Tribal Cultural Resources are resources that are of specific concern to California Native American tribes, and knowledge of such resources is limited to tribal people. Pursuant to CEQA, as revised in July 2015, such resources are to be identified by tribal people in direct, confidential consultation with the lead agency (PRC §21080.3.1).

The term, cultural resources, will be used in this report to describe historical resources under CEQA and cultural resources under Section 106.

Pursuant to Section 106 and the CEQA Guidelines, the goals of this study were to: 1) identify cultural resources within the project's APE; 2) provide an evaluation of the significance of identified resources; 3) determine resource vulnerability to adverse impacts that could arise from project activities; and 4) offer recommendations designed to protect cultural resource values, as warranted.

Resource Definitions

The National Register defines a historic property as a district, site, building, structure, or object significant in American history, architecture, engineering, archaeology, and culture, and that may be of value to the nation as a whole or important only to the community in which it is located. The National Park Service (NPS) describes these resources as follows (NPS 1995:4-5).

> **Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.
>
> **Building.** A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.
>
> **Structure.** The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.
>
> **Object.** The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.
>
> **District.** A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Significance Criteria

When a project might affect a cultural resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. For purposes of the National Register, the importance of a resource is evaluated in terms of criteria put forth in 36CFR60 (see below).

Eligibility criteria for the California Register of Historical Resources (CRHR) (Title 14 CCR, §4852) are very similar and will not be presented here.

> The quality of significance is present in properties that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. That are associated with the lives of persons significant in our past; or
>
> C. That embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. That have yielded or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, eligibility for both the CRHR and the National Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

The OHP advocates that all resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

PROJECT SETTING

Area of Potential Effects Location and Description

The APE is in the southern end of the Sacramento Valley which is bordered by the North Coast Ranges to the west, the Siskyou Mountains to the north, and the Sierra Nevada mountains to the east. Prior to the influx of Euro-Americans the Sacramento Valley was a vast prairie though large stands of forest occurred (Barbour and Major 1977). There are two parts to the APE: the archaeological APE and the architectural APE. The archaeological APE comprises a portion of APN 027-360-010 located northwest of the intersection of East Beamer Street and County Road 102 in Woodland, Yolo County, as shown on the Grays Bend 7.5' USGS topographic map (Figure 2). It consists of 8.5 acres situated on land with an overall slope of less than 2% (Figure 3). The closest water source was an unnamed creek located approximately 735 meters northwest of the northwestern corner of the APE; however, it has been channelized. The architectural APE encompasses the archaeological APE, but also includes parcels which immediately surround the APE, including the remainder of 027-360-010 (Figure 4).

The geology of the archaeological APE consists of basin deposits formed during the Holocene epoch (11,700 to present) (Gutierrez 2011).

Soils within the archaeological APE belong to the Sycamore and Willows series (Andrews 1972: Sheet 47). Sycamore soils are somewhat poorly-draining, silty clay loams found on alluvial fans. Willows soils are poorly draining clays found in basins. In a natural state both soils support the growth of grasses and forbs. Historically, parcels containing Sycamore and Willows soils were used for growing crops, orchards, pasture, wildlife habitat, and recreation (Andrews 1972:33 and 38).

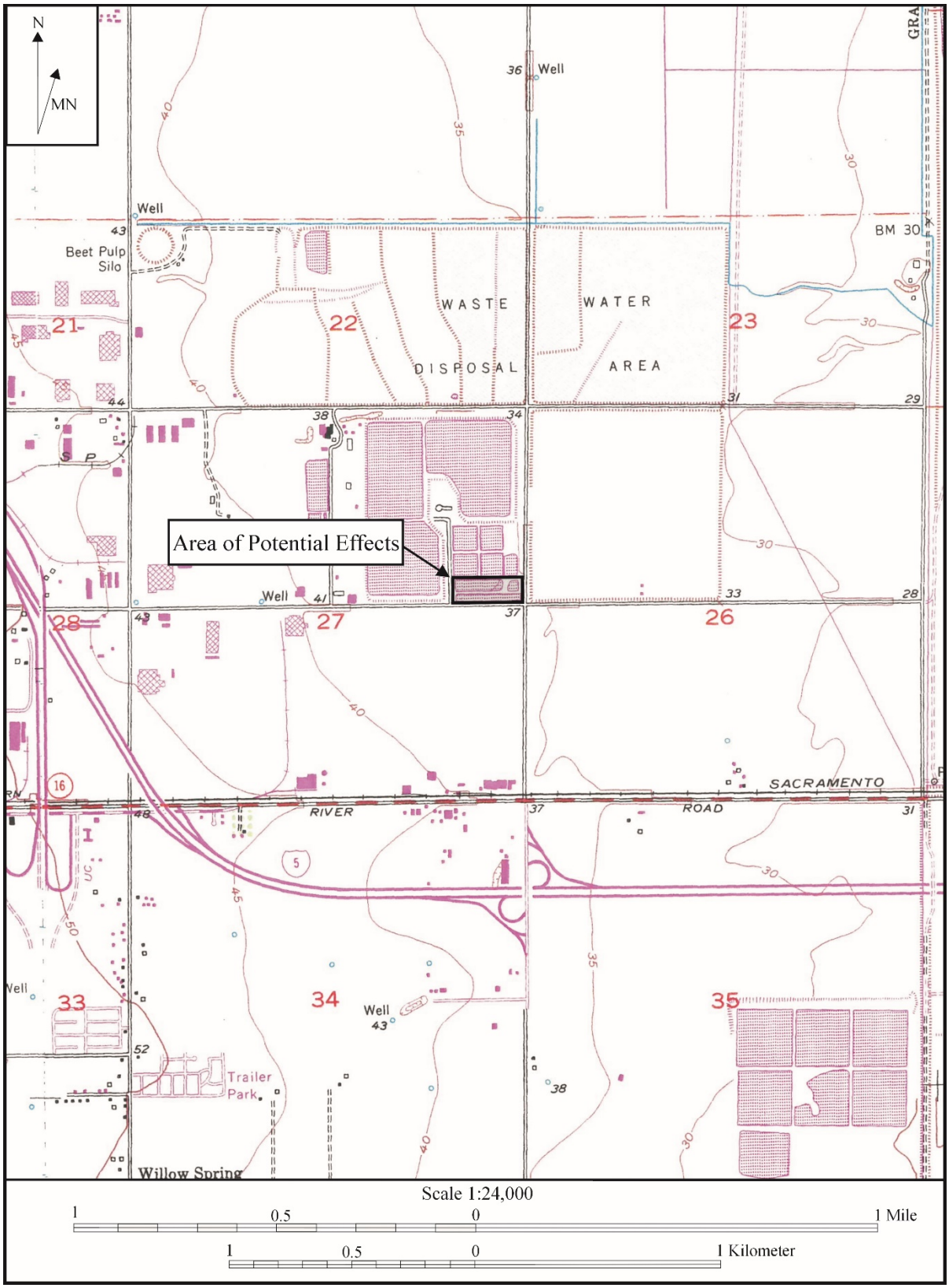


Figure 2. Area of Potential Effects location (adapted from the 1975 Grays Bend, 7.5' USGS topographic map).



Figure 3. Overview photo of the Area of Potential Effects, facing southwest.



Figure 4. Archaeological Area of Potential Effects (outlined in red) and parcels included in architectural Area of Potential Effects (outlined in yellow).

Cultural Setting

Prehistory

The concept of prehistory refers to the period of time before events were recorded in writing and varies worldwide. Because there is no written record, our understanding of California prehistory relies on archaeological materials and oral histories passed down through generations. Early archaeological research in this area began with the work of Max Uhle and Nels Nelson. Uhle is credited with the first scientific excavation in California with his work at the Emeryville Shellmound in 1902, and Nelson spent several years (1906 to 1908) surveying the San Francisco Bay margins and California coast for archaeological sites. In the 1930s, archaeologists from Sacramento Junior College and the University of California began piecing together a sequence of cultures primarily based on burial patterns and ornamental artifact from sites in the lower Sacramento Valley (Lillard *et al*. 1939; Heizer and Fenenga 1939). Their cultural sequence became known as the Central California Taxonomic System (CCTS), which identified three culture periods termed the Early, Middle, and Late Horizons, but without offering date ranges. Refinement of the CCTS became a chief concern of archaeologists as the century progressed with publications by Richard Beardsley (1948, 1954) and Clement Meighan (1955) based on materials excavated by the University of California archaeological survey.

In 1973, David Fredrickson synthesized prior work, and in combination with his own research, he developed a chronology that is used to this day, albeit modified for locality-specific circumstances. Fredrickson's scheme shows that native peoples have occupied the Central California for over 11,000 years (which is supported by Erlandson *et al.* 2007), and during that time, shifts took place in their social, political, and ideological regimes (Fredrickson 1973).

In addition, Fredrickson defined cultural patterns pertinent to the Sacramento Valley (1973). Although Fredrickson's concept of a pattern has no temporal implications, the Windmiller, Berkeley, and Augustine patterns tend to be stratified (Moratto 2004: Figure 5.11).

In 1960, the first study of obsidian hydration as a dating tool for archaeologists was published (Friedman and Smith 1960). This study showed that the chemical composition of the obsidian and temperature effect the hydration process. It was not until the 1980s that research into this dating method was conducted for application in California. In 1987, Thomas Origer devised a hydration chronology for the north Bay Area which contains four major obsidian sources that are found in Sacramento Valley sites. This chronology was developed by pairing micron readings taken from stylistically distinctive projectile points and pairing them with radiocarbon dates. Origer was able to develop a hydration rate for Annadel and Napa Valley obsidian sources as a result of his study. Later, Tremaine (1989, 1993) was able to develop comparison constants among the four primary obsidian sources in the north Bay Area.

The development of obsidian hydration rates for the four north Bay Area obsidian sources has provided archaeologists the ability to obtain dates from sites that could not previously be dated due to lack of diagnostic artifacts or organic material suitable for radiocarbon dating. Origer was able to support and refine Fredrickson's chronology dating tools diagnostic of certain periods (Origer 1987). Table 1 assimilates Fredrickson's (1973) chronology and patterns and the obsidian hydration dating scheme from Origer (1987).

Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire-affected stones.

Table 1. Lower Sacramento Valley Chronology

Temporal Period[1]	Approximate Time Range[1]	~ Hydration Interval (μ)[2]	Patterns[3]
Historical	< AD 1800	<1.20	
Upper Emergent	AD 1800 to AD 1500	1.21 - 1.84	Augustine
Lower Emergent	A.D. 1500 to A.D. 1000	1.85 - 2.58	
Upper Archaic	AD 1000 to 500 BC	2.59 - 4.05	Berkeley
Middle Archaic	500 BC to 3000 BC	4.06 - 5.72	Windmiller
Lower Archaic	3000 BC to 6000 BC	5.73 - 7.23	
Paleo-Indian	6000 BC to 8000 BC	7.24 - 8.08+	

[1] based on Fredrickson (1994)
[2] based on Napa Glass Mountain rate by Origer (1987)
[3] based on Moratto (2004)

Ethnography

Linguists and ethnographers tracing the evolution of languages have found that most of the indigenous languages of the California region belong to one of five widespread North American language groups (the Hokan and Penutian phyla, and the Uto-Aztecan, Algic, and Athabaskan language families). The distribution and internal diversity of four of these groups suggest that their original centers of dispersal were outside, or peripheral to, the core territory of California, that is, the Central Valley, the Sierra Nevada, the Coast Range from Cape Mendocino to Point Conception, and the Southern California coast and islands. Only languages of the Hokan phylum can plausibly be traced back to populations inhabiting parts of this core region during the Archaic period, and there are hints of connections between certain branches of Hokan, such as that between Salinan and Seri, that suggest that at least some of the Hokan languages could have been brought into California by later immigrants, primarily from the Southwest and northwestern Mexico (Golla 2011).

At the time of European settlement, the APE was situated in within the territory of the Patwin (Kroeber 1925; Johnson 1978). The Patwin were hunter-gatherers who lived in rich marsh and plains environments, which allowed for dense populations with complex social structures (Kroeber 1925; Levy 1978). The Patwin settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary villages were inhabited throughout the year while other sites were visited seasonally to obtain particular resources. Sites were often established near fresh water sources and at ecotones where plant and animal life was diverse and abundant. The environmental setting enjoyed by the Patwin provided abundant plant and animal resources for their use (Kroeber 1925; Johnson 1978).

History

The year 1808 was the year Europeans entered the Sacramento Valley. Gabriel Moraga's directive was to look for sites that would be suitable for establishing missions and to look for rancherias (Native American villages). No missions were established in the Sacramento Valley and it wasn't until the early 1840s that ranchos were established. This could, in part, be due to the upheaval surrounding Mexico seceding from Spain in 1821 (Larkey and Walters 1987:13-21).

The founding of the seven Mexican ranchos in Yolo County were the beginnings of the agricultural industry in Yolo County which proliferated with the advent of the Gold Rush and California becoming a state (Larkey and Walter 1987:37-54).

Historically, the APE lies just east of the City of Woodland. Woodland's early beginings started with John Morris who came from Kentucky with his family in 1849. In 1853, Henry Wyckoff opened a merchandise store nearby (Larkey and Walters 1987:34). Although Woodland came from small and humble beginnings, the town grew and by 1862, community members voted to move the county seat to the City of Woodland, where it has remained ever since (Gregory 1913:52-53).

In 1865, the APE was purchased from the State of California by John Hollingsworth (GLO 1865). Census records show that Hollingsworth lived in the vicinity of Woodland; however, historical maps and atlases show that the APE was under the ownership of an Owen Dinsdale for several years, suggesting that Hollingsworth sold the land containing the APE prior to 1879 (Ashley 1900, 1909; De Pue & Company 1879; Henning 1871; Miller 1891; Proctor 1915, 1926).

Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

STUDY PROCEDURES AND FINDINGS

Native American Contact

A request was sent on October 1, 2019, to the State of California's Native American Heritage Commission seeking information from the Sacred Lands File and the names of Native American individuals and groups that would be appropriate to contact regarding this project.

Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
United Auburn Indian Community of the Auburn Rancheria
Yocha Dehe Wintun Nation

This contact does not constitute consultation with tribes.

Native American Contact Results

The Native American Heritage Commission replied with a letter dated October 3, 2019, in which they indicated that the Sacred Lands File has no information about the presence of Native American cultural resources in the immediate project area. No other comments have been received as of the date of this report. A log of contact efforts is appended to this report, along with copies of correspondence (see Appendix A).

Archival Research Procedures

Archival research included examination of the library and project files at Tom Origer & Associates. This research is meant to assess the potential to encounter archaeological sites and built environment within the APE. Research was also completed to determine the potential for buried archaeological deposits.

A review (NWIC File No. 19-0610) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park by Eileen Barrow on October 9, 2019. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the OHP's *Historic Property Directory* (2012).

The OHP has determined that structures in excess of 45 years of age could be important historical resources, and former building and structure locations could be important archaeological sites. Archival research included an examination of 19th and 20th-century maps and aerial photographs to gain insight into the nature and extent of historical development in the general vicinity, and especially within the APE.

Ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the "Materials Consulted" section of this report.

A model for predicting a location's sensitivity for buried archaeological sites was formulated by Byrd *et al.* (2017) based on the age of the landform, slope, and proximity to water. A location is considered

to have highest sensitivity if the landform dates to the Holocene, has a slope of five percent or less, is within 150 meters of freshwater, and 150 meters of a confluence. Note: the Holocene Epoch is the current period of geologic time, which began about 11,700 years ago, and coincides with the emergence of human occupation of the area. A basic premise of the model is that archaeological deposits will not be buried within landforms that predate human colonization of the area. Calculating these factors using the buried site model (Byrd *et al.* 2017:Tables 11 and 12), a location's sensitivity will be scored on a scale of 1-10 and classed as follows: lowest (<1); low (1-3); moderate (3-5.5); high (5.5-7.5); highest (>7.5).

Archival Research Findings

Archival research found that the archaeological APE had not been previously subjected to a cultural resources survey. Three studies have been conducted within a quarter-mile of the APE (Huberland and Westwood 2001; Jensen & Associates 1987; Peak & Associates, Inc. 2003). No resources have been recorded within a quarter-mile of the APE.

There are no reported ethnographic sites within one mile of the APE (Kroeber 1925; Johnson 1978).

A review of 19th and 20th century maps shows a building within the archaeological APE as early as 1858, which shows a house (GLO 1858). John Hollingsworth purchased the land from the State of California in 1865; however, his name is not associated with the property on any subsequent maps (GLO 1865). Review of subsequent maps do not show any buildings within the APE, so it is unclear if the plotting was an error or if the house was removed by 1872 (GLO 1872; USACE 1953; USGS 1907, 1916, 1954a, 1954b).

On the 1954 USGS map, a wastewater treatment facility is shown north of the APE (USGS 1954a, 1954b). Review of maps and aerial photos subsequent to 1954 show ponds related to the wastewater treatment facility within the APE and north of the APE appearing by 1968 (University of Santa Barbara 1969). By 1993 the wastewater treatment facility is no longer present; though, the ponds still remain.

Based on landform age, our analysis of the environmental setting, and incorporating Meyer and Kaijankoski (2017) analysis of sensitivity for buried sites, there is a moderate potential (~3.07) for buried archaeological site indicators within the archaeological APE.

Field Survey Procedures

An intensive field survey was completed by Eileen Barrow on October 14, 2019. The archaeological APE was surveyed by walking in zig-zagging transects measuring approximately 15 meters apart. Ground visibility ranged from excellent to poor, with fill soils being the primary hindrance. Special attention was paid to the plotted location of the building shown on the 1858 GLO.

In addition to the surface survey, two hand-dug auger holes using a 4-inch diameter barrel auger were excavated to examine subsurface soils within the APE (see Figure 5). Auger hole #1 was excavated to a depth of 120 centimeters and auger hole #2 was excavated to a depth of 150 centimeters.

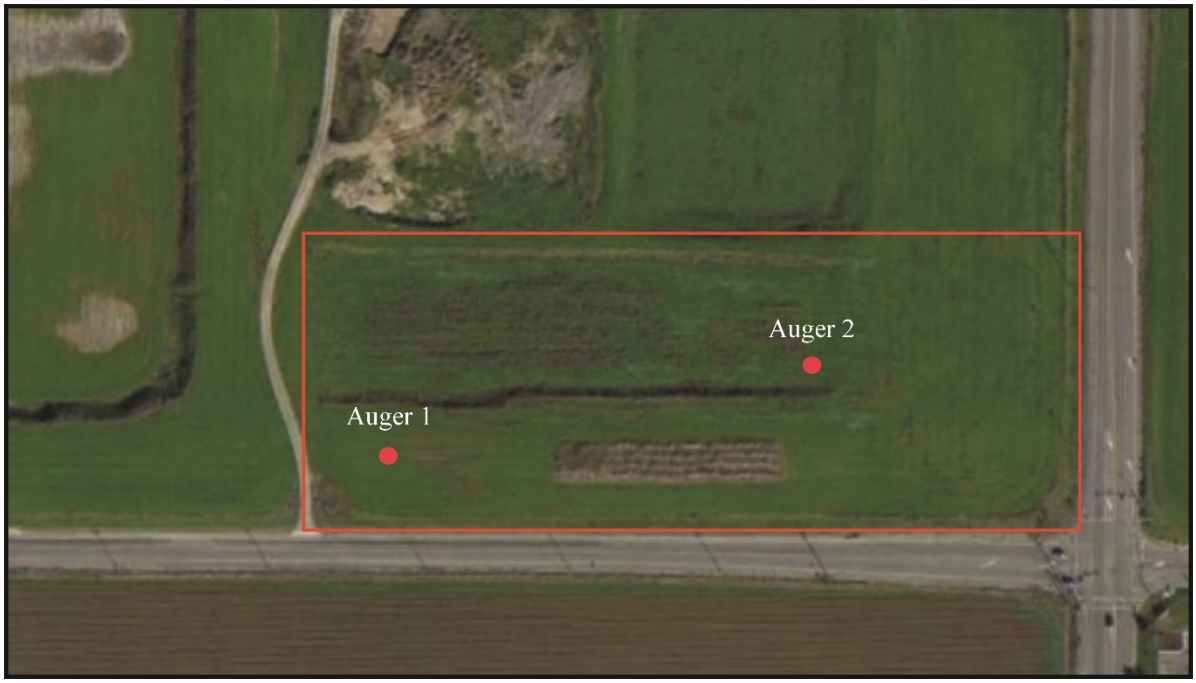


Figure 5. Location of auger holes within the APE.

Field Survey Findings

Archaeology

No archaeological site indicators were observed during the course of the survey. The soil in the auger holes was a silty loam consistent with the description in the soil survey. No archaeological site indicators were found within the auger holes.

Built Environment

The architectural APE consists of the project area on a portion of APN 027-360-010 and three other surrounding parcels. A description of the surrounding parcels that comprise the architectural APE are listed in Table 2, with numbers that correspond with their location as shown on Figure 4. Appendix B contains photos of the building located at 2050 E. Beamer Street and the land surrounding the APE. All other surrounding parcels are vacant.

Table 2. List of Parcels Examined

Map #	Address	APN	Description	Year
1	E. Beamer Street	027-360-010	Vacant	
2	E. Beamer Street	027-350-001	Vacant/agriculture	
3	2050 E. Beamer Street	027-350-050	Industrial	Post 1987
4	41750 E. Main Street	027-370-034	Vacant/agriculture	

Area of Potential Effects. Field survey confirmed the presence of a wastewater pond within the APE. The pond measures approximately 685 feet long by 170 feet wide and 8 feet deep. The western portion of the pond has been graded slightly so that the grade into the pond is gentler so as to allow vehicular access. It appears two ponds that once existed within the APE, the southernmost pond and the easternmost pond, have both been filled in.

Adjacent Parcels. Parcels adjacent to the subject property are primarily vacant. The only parcel with a building on it is located at 2050 E. Beamer Street and it was built at some point after 1987. It is a large, industrial building that currently houses a Target distribution center.

DISCUSSION AND RECOMMENDATIONS

The APE has a moderate potential for buried resources; however, no arcaheological site indicators were found within the auger holes.

The wastewater treatment ponds within and adjacent to the APE meet the age threshold for consideration for inclusion on the California and National registers, though the removal of the wastewater facility and the filling of some of the ponds has compromised their integrity.

Recommendations

Archaeology

No archaeological remains were observed during the course of our survey; therefore, no recommendations are warranted.

Built Environment

The wastewater treatment ponds within the APE will be altered as part of the proposed project. Their age prompts an evaluation for their inclusion on the California and National registers.

Accidental Discovery

If buried materials are encountered, all soil disturbing work should be halted at the location of any discovery until a qualified archaeologist completes a significance evaluation of the find(s) pursuant to Section 106 of the National Historic Preservation Act (36CFR60.4). Prehistoric archaeological site indicators expected within the general area include: chipped chert and obsidian tools and tool manufacture waste flakes; grinding and hammering implements that look like fist-size, river-tumbled stones; and for some rare sites, locally darkened soil that generally contains abundant archaeological specimens. Historical remains expected in the general area commonly include items of ceramic, glass, and metal. Features that might be present include structure remains (e.g., cabins or their foundations) and pits containing historical artifacts.

The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the NAHC. The NAHC will identify the person or persons believed to be most likely descended from the deceased Native American.

The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SUMMARY

Tom Origer & Associates completed a cultural resources study for the East Beamer Way Project, Woodland, Yolo County, California. The study was requested and authorized by Raney Planning & Management, Inc. The City of Woodland has applied for federal funds to build affordable housing within the APE; therefore, this project is subject to Section 106 and the requirements of the United States Department of Housing and Urban Development and CEQA requirements as required by the City of Woodland. A wastewater treatment pond is located within the APE. Recommendations for its treatment have been provided. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2019-101S).

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APPENDIX A

Native American Contact

Copies of Correspondence

Native American Contact Efforts
East Beamer Way Project
Woodland, Yolo County

Organization	Contact	Action	Results
Native American Heritage Commission		Form 10/1/19	The NAHC replied via email with a letter dated October 3, 2019, which indicated that the Sacred Lands File has no information about the presence of Native American cultural resources in the immediate project area.
Cortina Rancheria - Kletsel Dehe Band of Wintun Indians	Charlie Wright	Letter 10/1/19	No response received as of the date of this report.
United Auburn Indian Community of the Auburn Rancheria	Gene Whitehouse	Letter 10/1/19	No response received as of the date of this report.
Yocha Dehe Wintun Nation	Anthony Roberts	Letter 10/1/19	No response received as of the date of this report.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: East Beamer Way
County: Yolo

USGS Quadrangles
Name: Calistoga
Township T10N Range R2E Section(s) 27 MDBM

Date: October 1, 2019
Company/Firm/Agency: Tom Origer & Associates
Contact Person: Eileen Barrow

Address: P.O. Box 1531
City: Rohnert Park Zip: 94927
Phone: (707) 584-8200 Fax: (707) 584-8300
Email: eileen@origer.com

Project Description: The City of Woodland is seeking funding from the United States Department of Housing and Urban Development to construct a 61-unit permanent supportive housing development to serve homeless individuals. In addition, the site will include an emergency homeless shelter and a substance abuse treatment facility.

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

October 3, 2019

Eileen Barrow
Tom Origer & Associates

VIA Email to: eileen@origer.com

RE: East Beamer Way Project, Yolo County

Dear Ms. Barrow:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Staff Services Analyst

Attachment

Native American Heritage Commission
Native American Contacts List
October 3, 2019

Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
Charlie Wright, Chairperson
P.O. Box 1630 Wintun / Patwin
Williams ,CA 95987
(530) 473-3274 Office
(530) 473-3301 Fax

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road Maidu
Auburn ,CA 95603 Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Yocha Dehe Wintun Nation
Anthony Roberts, Chairperson
P.O. Box 18 Wintun (Patwin)
Brooks ,CA 95606
aroberts@yochadehe-nsn.gov
(530) 796-3400
(530) 796-2143 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:
East Beamer Way Project, Yolo County.

Tom Origer & Associates
Archaeology / Historical Research

October 1, 2019

Gene Whitehouse
United Auburn Indian Community of the Auburn Rancheria
10720 Indian Hill Road
Auburn, CA 95603

RE: East Beamer Way, Woodland, Yolo County

Dear Mr. Whitehouse:

I am writing to notify you of a proposed project within the City of Woodland, for which our firm is conducting a cultural resources study. The City of Woodland is seeking funding from the United States Department of Housing and Urban Development to construct a 61-unit permanent supportive housing development to serve homeless individuals. In addition, the site will include an emergency homeless shelter and a substance abuse treatment facility. The City of Woodland is reviewing the project for California Environmental Quality Act compliance and the United States Department of Housing and Urban Development is reviewing the project for Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Grays Bend, Calif. 7.5' USGS topographic quadrangle showing Area of Potential Effects.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

P.O. Box 1531, Rohnert Park, California 94927 ♦ www.origer.com Phone (707) 584-8200

Tom Origer & Associates
Archaeology / Historical Research

October 1, 2019

Charlie Wright
Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
P.O. Box 1630
Williams, CA 95987

RE: East Beamer Way, Woodland, Yolo County

Dear Mr. Wright:

I am writing to notify you of a proposed project within the City of Woodland, for which our firm is conducting a cultural resources study. The City of Woodland is seeking funding from the United States Department of Housing and Urban Development to construct a 61-unit permanent supportive housing development to serve homeless individuals. In addition, the site will include an emergency homeless shelter and a substance abuse treatment facility. The City of Woodland is reviewing the project for California Environmental Quality Act compliance and the United States Department of Housing and Urban Development is reviewing the project for Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Grays Bend, Calif. 7.5' USGS topographic quadrangle showing Area of Potential Effects.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

October 1, 2019

Anthony Roberts
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, CA 95606

RE: East Beamer Way, Woodland, Yolo County

Dear Mr. Roberts:

I am writing to notify you of a proposed project within the City of Woodland, for which our firm is conducting a cultural resources study. The City of Woodland is seeking funding from the United States Department of Housing and Urban Development to construct a 61-unit permanent supportive housing development to serve homeless individuals. In addition, the site will include an emergency homeless shelter and a substance abuse treatment facility. The City of Woodland is reviewing the project for California Environmental Quality Act compliance and the United States Department of Housing and Urban Development is reviewing the project for Section 106 of the National Historic Preservation Act compliance.

This letter serves as notification of the project and does not constitute consultation.

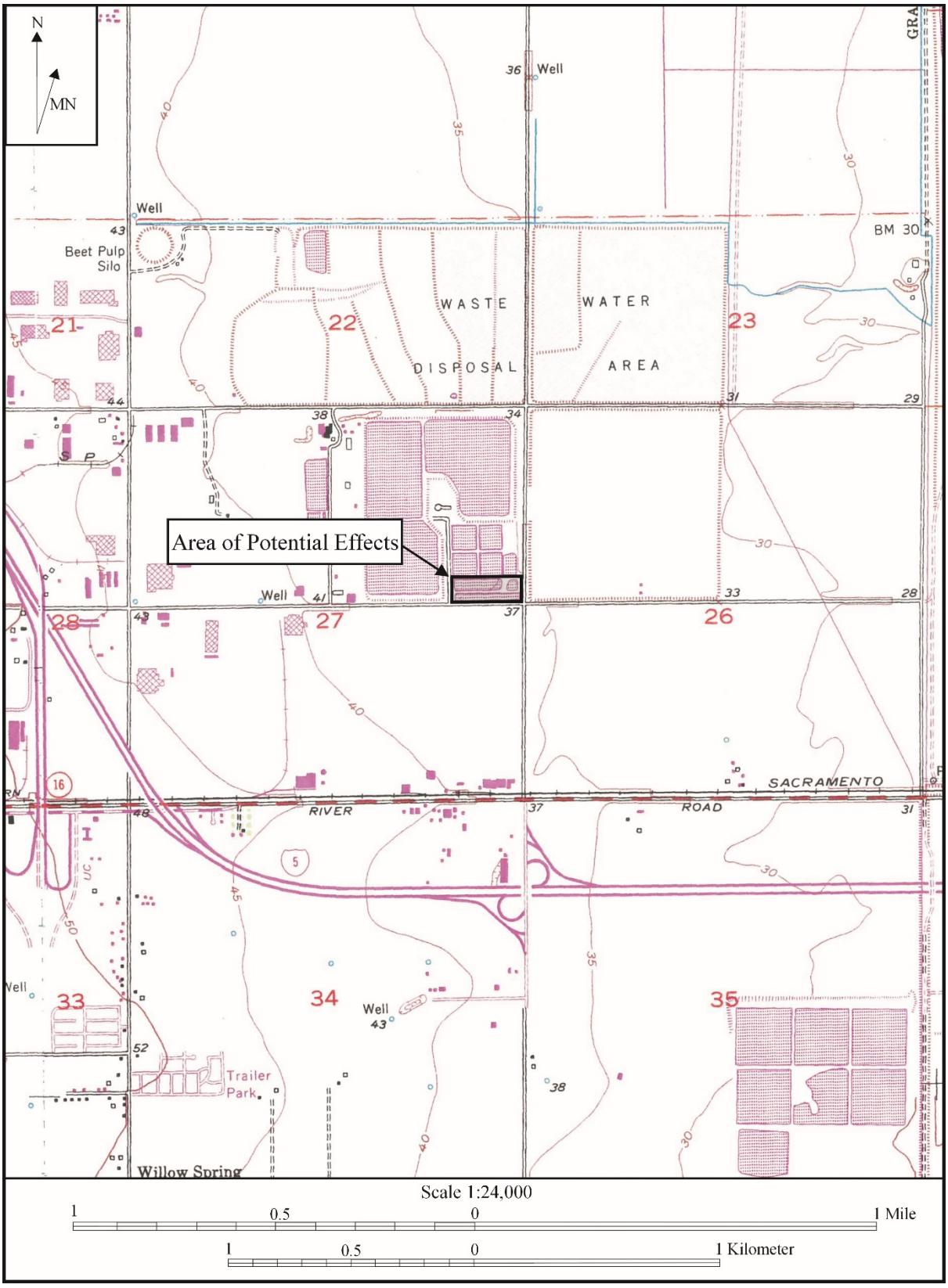
Enclosed is a portion of the Grays Bend, Calif. 7.5' USGS topographic quadrangle showing Area of Potential Effects.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

P.O. Box 1531, Rohnert Park, California 94927 ♦ www.origer.com Phone (707) 584-8200


N
MN
Well
Beet Pulp Silo
WASTE
WATER
DISPOSAL
AREA
BM 30
Area of Potential Effects
Well
SACRAMENTO
RIVER
ROAD
Well
Trailer Park
Willow Spring
21
22
23
26
27
28
33
34
35
Scale 1:24,000
1
0.5
0
1 Mile
1
0.5
0
1 Kilometer

APPENDIX B

Photographs



Figure 1. Map number 1 Portion of APN 027-360-010



Figure 2. Map number 2 APN 027-350-001



Figure 3. Map number 3 2050 E. Beamer Street



Figure 4. Map number 4 41750 E. Main Street

APPENDIX C

DPR 523 Forms
Resource Documentation

Archaeological site location information should be kept confidential to protect sites from damage by vandals and collectors

PRIMARY RECORD

Primary #:
HRI #:
Trinomial:
Other Listings: **NRHP Status Code:**
Review Code: **Reviewer:** **Date:** **Resource Name or #:** Woodland Wastewater Ponds

P1. Other Identifier:

P2. Location: Unrestricted **a. County:** Yolo

b. USGS 7.5' Quad: Grays Bend **Date:** 1975

T10**N**/**R**2**E**; SE**1/4 of** NE**1/4 of Sec.** 27; **MDBM** (measured from the SE section corner)

c. Address: northwest of intersection of E. Beamer Street and CR 102 **City:** Woodland **Zip:** 95776

d. UTM: Zone: 10

Northwest Corner	609920**mE**	4283310**mN**
Northeast Corner	610580**mE**	4283317**mN**
Southwest Corner	609925**mE**	4282530**mN**
Southeast Corner	610585**mE**	4282540**mN**

e. Other Locational Information: From downtown Woodland, take Main Street east for 1.5 miles. Turn left on CR 102 and follow for half a mile. The property containing the wastewater ponds is northwest of the intersection of CR 102 and E. Beamer Street.

P3a. Description: This resource currently consists of eight wastewater treatment ponds. The Woodland Wastewater Treatment System was constructed on the property in 1950. Based on review of aerial photos, only the treatment facility, six undulating ponds on the northern half of the property, and a second building of unknown function in the northeast portion of the southeast quadrant of the property were in place. By 1968 eight ponds in the southeast quadrant of the property were present. By 1973 the large pond in the southwest quadrant of the property was present, and the six undulating ponds in the north half had been changed into two large ponds. At some point prior to 1993 the wastewater treatment facility was demolished. The second building was demolished between 1993 and 2002. Most of the ponds remain; though three of the eight ponds located in the southeast quadrant of the property have been filled in.

P3b. Resource Attributes: HP22. Wastewater ponds

P4. Resources Present: Structures

P5. Photograph or Drawing:

P5b. Description of Photo: View of ponds facing southeast.



P6. Date Constructed/Age and Sources:
1950-1973

P7. Owner and Address:
City of Woodland
300 1st Street
Woodland, CA 95695

P8. Recorded by:
E. Barrow
Tom Origer & Associates
P.O. Box 1531
Rohnert Park, CA 94927

P9. Date Recorded:
October 2019

P10. Type of Survey:
Reconnaissance

P11. Report Citation:
Barrow, E.
2019 *Cultural Resources Study for the East Beamer Way Project, Woodland, Yolo County, California*

P12. Attachments: Continuation Sheet (2), Location Map



Layout of wastewater treatment facility in 1973.

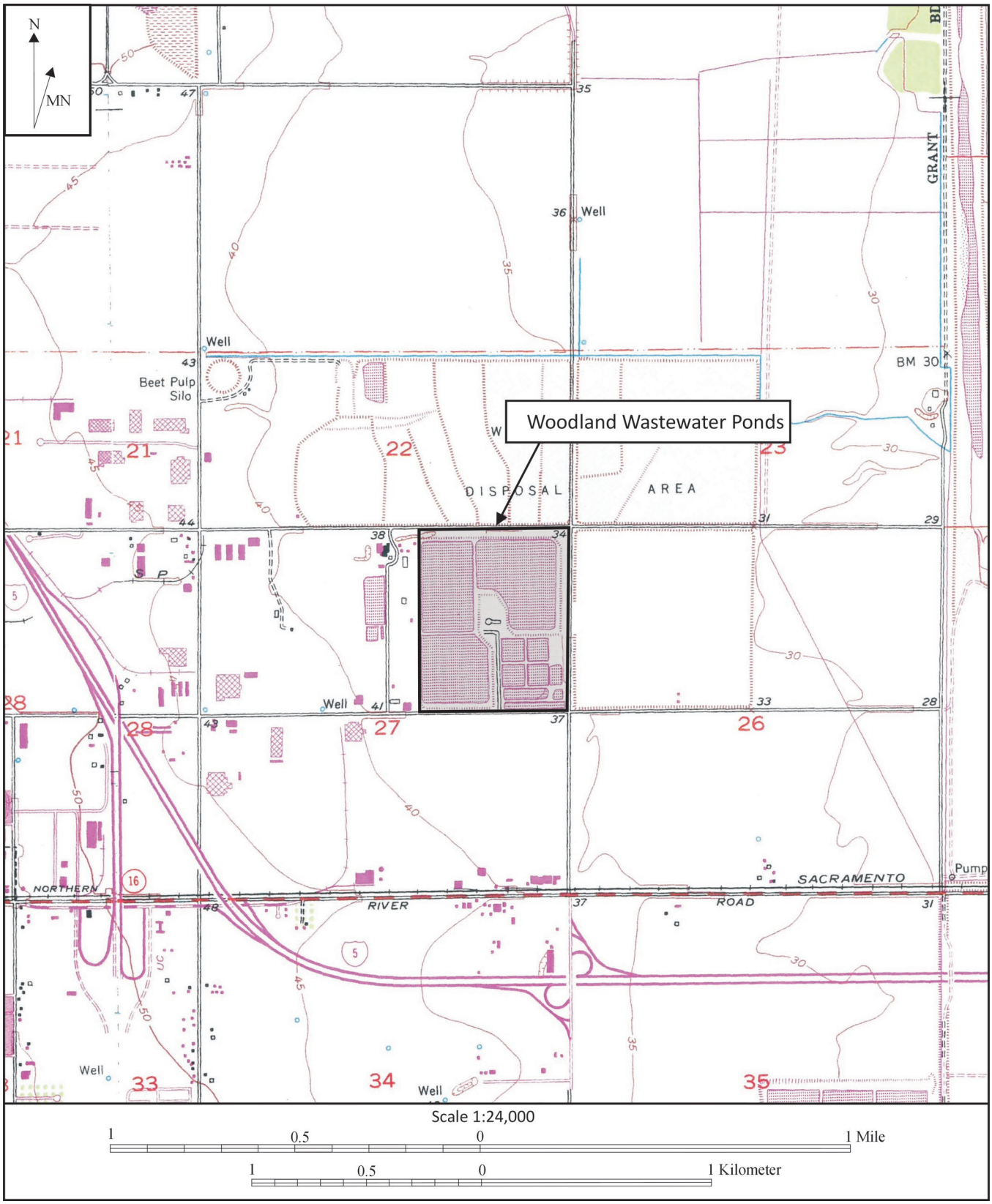


Layout of wastewater treatment facility in 2018.

LOCATION MAP

Primary #:
HRI #:
Trinomial:
Resource Name or #: Woodland Wastewater Ponds

Map Name: Grays Bend **Scale:** 7.5'
Date of Map: 1975



Appendix D

Geotechnical Engineering Report

Geotechnical Engineering Report

EAST BEAMER STREET HOUSING PROJECT

WKA No. 12185.02P

January 29, 2020

Prepared for:

City of Woodland Community Development

300 1st Street

Woodland, California 95695

Geotechnical Engineering Report

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

WKA No. 12185.02P

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Grain Size Distribution Test Results ..... Figure A10

APPENDIX B – Earthwork Specifications

Wallace Kuhl & Associates

CORPORATE OFFICE
3050 Industrial Boulevard
West Sacramento, CA 95691
916.372.1434 phone
916.372.2565 fax

STOCKTON OFFICE
3422 West Hammer Lane, Suite D
Stockton, CA 95219
209.234.7722 phone
209.234.7727 fax

Geotechnical Engineering Report
EAST BEAMER STREET HOUSING PROJECT
East Beamer Street and County Road 102
Woodland, California
WKA No. 12185.02P
January 29, 2020

INTRODUCTION

We have completed a geotechnical engineering study for the proposed East Beamer Street Housing Project to be constructed northwesterly of the intersection of East Beamer Street and County Road 102 in Woodland, California (see Figure 1). The purpose of our study has been to explore the soil and groundwater conditions at the site, and to provide geotechnical conclusions and recommendations regarding design and construction of the proposed housing development.

Scope of Services

Our scope of services included the following tasks:

1. perform site reconnaissance;
2. review of United States Geological Survey (USGS) topographic maps, historical aerial photographs, and available groundwater data;
3. review of previous studies performed near the site;
4. perform subsurface explorations, including the excavating and sampling of six soil borings to depths ranging from approximately 16½ to 21½ feet below the existing site grades;
5. collect representative bulk samples of near-surface soils;
6. perform laboratory testing of selected soil samples to determine various soil engineering properties;
7. perform engineering analyses; and,
8. preparation of this report.

Our firm also completed a *Phase I Environmental Site Assessment* for the site (WKA No. 12185.01; dated January 9, 2019); that report has been provided under a separate cover. Information gathered in that report was reviewed during the preparation of this geotechnical study.

Figures and Attachments

This report contains a Vicinity Map as Figure 1; a Site Plan showing the approximate locations of our exploratory borings as Figure 2; Logs of Borings completed for this study as Figures 3 through 8. An explanation of the symbols and classification system used on the logs is contained in Figure 9. Appendix A contains general information regarding project concepts, exploratory methods used during the field exploration phase of this study, an explanation of laboratory testing accomplished, and laboratory test results not presented on the boring logs. Appendix B contains *Earthwork Specifications* that may be used in the preparation of project plans and contract documents.

Project Description

We understand the City of Woodland intends to develop approximately 5.5-acres of city-owned property with 61 permanent supportive residences, a substance use disorder residential treatment program building, and a new Emergency Shelter Services building. The structures will be single story. The 61 supportive residences will consist of wood-framed pre-manufactured dwellings supported on concrete pier foundations. The new 10,000 square foot emergency services shelter and 10,000 square foot treatment center will be wood-framed with interior concrete slabs-on-grade. Structural loads for the buildings are anticipated to be light based on this type of construction. Associated improvements will include construction of underground utilities, landscaping, exterior flatwork, and asphalt concrete paved access roads with parking.

We understand the development area to be elevated above base flood elevation is within a 200-year flood plain and Wood-Rodgers of Sacramento, California will perform a flood analysis soon to determine the impacts of elevating a five- to eight-acre area. Though the actual building area pad is only about 5.5-acres, the perimeter of the raised portion will drain mostly north to the drainage basins originally graded as wastewater treatment ponds, so the disturbed area will be about eight acres. Fills on the order of 5 to 10 feet are anticipated for development of the site.

FINDINGS

Site Description

The project site encompasses approximately 5.5 acres, located northwesterly of the intersection of East Beamer Street and County Road 102 in Woodland, California (Figure 1). The property is bounded to the north and west by fallow undeveloped land; to the south by East Beamer Street, beyond which is fallow undeveloped land; and to the east by County Road 102, beyond

which is fallow undeveloped land. Based on topographic information available on Google Earth software, ground surface elevations appear to vary from about +41 feet relative to mean sea level (msl) to about +51 feet msl. This information is consistent with topography data for the site shown on the USGS 7.5-minute Topographic Map of Greys Bend, California, 2018. The low spots are remnants of ponds at the site that are now dry.

At the time of our field exploration activities on December 30, 2019, the majority of the property consisted of vacant, undeveloped land covered with volunteer weeds, grass, and a stockpile of rubbish or debris. A pond is about 5 feet deep and located near the center of the site, and portions of two ponds are located near the northern boundary of the site. An approximately 700-square-foot stockpile was observed in the southern portion of the site, covered with rubbish and debris. The approximate locations of the ponds and soil stockpile are shown in Figure 2.

Based on the *Public Improvement Plans for East Beamer Street Housing Project* prepared by Laugenour and Meikle of Woodland, California, existing storm drain and sanitary sewer underground utility lines transect the southern portion of the site in an east-west orientation and are located just north of the southern site boundary.

Historical Aerial Photographs

Our review of historic aerial photographs indicates the site was used for dry farm crop cultivation from at least 1937 to at least 1954. The aerial photograph taken in 1968 shows three ponds which cover the majority of the site, with the northern boundary extending into two additional ponds. Four more ponds are also visible to the north of the site. The aerial photograph taken in 1974 shows a portion of a new pond visible in the northeast portion of the site. The aerial photograph taken in 1977 shows one of the ponds is no longer visible and may have been backfilled. The site remained relatively unchanged until the aerial photograph from 1993 shows the ponds appear to be dry. The 2002 aerial photograph shows a stockpile of soil on the south-central portion of the site similar in shape and size to the current stockpile on site. The aerial photograph taken in 2016 shows ground markings that indicate the majority of the property has been disced for weed abatement. The approximate location of the soil stockpile and ponds are indicated in Figure 2. For additional information regarding the history of the site, please refer to our *Phase I Environmental Site Assessment* (WKA No. 12185.01, dated January 9, 2019).

Subsurface Conditions

Soil borings D1 through D6 were performed on December 30, 2019 at the approximate locations shown on the attached Site Plan (Figure 2).

The soils encountered within 20 feet of the ground surface generally consist of medium stiff to very stiff, lean clay and sandy clay with occasional interbedded layers of loose to medium dense, clayey sand and poorly graded sand, underlain by medium dense sandy gravel.

At the completion of drilling activities, the borings were backfilled with a slurry of neat cement, bentonite, and water as required by the Yolo County Environmental Health Department. For specific information regarding the subsurface conditions at a specific location, please refer to the Logs of Borings, Figures 3 through 8.

Groundwater

Groundwater was encountered at a depth of approximately 17 feet within the borings performed on December 30, 2019. Please note, the groundwater levels in the borings may not have been left open long enough for water levels to reach static equilibrium.

To supplement the groundwater information obtained from the field explorations, we reviewed available groundwater data obtained from the California Department of Water Resources (DWR) Water Data Library. We reviewed data from four monitoring wells. Data for one well, identified as 386794N1217190W001 and located about .62 miles southeast of the site, indicated that groundwater depths ranged from 3.5 to 71.5 feet BGS during the period from 1952 to 2004. There appears to have been periods of rapid drawdown in the 1960s and 1970s; however, based on the more recent available data, it is reasonable to assume that shallow groundwater can be anticipated at the site, possibly within the upper five to ten feet below ground surface depending on the time of year.

CONCLUSIONS

Building Support

The upper foot of soil across the site has been disturbed due to previous site activities and are in a relatively soft/loose condition. The disturbed soils are not considered capable of supporting the planned improvements, unless these materials are thoroughly moisture conditioned and uniformly compacted in accordance with the recommendations presented in this report.

Based on our field testing and laboratory testing results, it is our opinion the undisturbed near-surface soils at the site are capable of supporting the planned improvements, provided the recommendations of this report are carefully followed. It is also our opinion that the recompacted surface soils and engineered fill, when placed and compacted in accordance with the recommendations of this report, will be capable of supporting the planned improvements.

2019 Seismic Design Parameters

We understand the project will be designed under the 2019 edition of the *California Building Code* (CBC). The 2019 CBC references the *American Society of Civil Engineers (ASCE), Minimum Design Loads and Associated Criteria for Buildings and Other Structures 7-16*. To assist with the structural design of the project, we have provided seismic design parameters for the 2019 CBC, which have been determined based on the site location and the public domain computer program developed by the Structural Engineers Association of California (SEAOC) and the Office of Statewide Health Planning and Development (OSHPD) (https://seismicmaps.org).

The following seismic design parameters summarized below may be used for seismic design of the proposed improvements.

TABLE 3
2019 CBC SEISMIC DESIGN PARAMETERS

Latitude: 38.6850° N Longitude: 121.7306° W	ASCE 7-16 Table/Figure	2019 CBC Table/Figure	Factor/ Coefficient	2019 CBC Value
Short-Period MCE_R at 0.2 second	Figure 22-1	Figure 1613.2.1(1)	S_S	0.870 g
1.0 second Period MCE_R	Figure 22-2	Figure 1613.2.1(2)	S_1	0.322 g
Soil Class	Table 20.3-1	Section 1613.2.2	Site Class	D
Site Coefficient	Table 11.4-1	Table 1613.2.3 (1)	F_a	1.152
Site Coefficient	Table 11.4-2	Table 1613.2.3(2)	F_v	1.978*
Adjusted MCE Spectral Response Parameters	Equation 11.4-1	Equation 16-36	S_{MS}	1.002 g
	Equation 11.4-2	Equation 16-37	S_{M1}	0.637 g*
Design Spectral Acceleration Parameters	Equation 11.4-3	Equation 16-38	S_{DS}	0.668 g
	Equation 11.4-4	Equation 16-39	S_{D1}	0.424 g*
Seismic Design Category	Table 11.6-1	Section 1613.2.5(1)	Risk Category I to IV	D
	Table 11.6-2	Section 1613.2.5(2)	Risk Category I to IV	D

Notes: MCE_R = Risk-Targeted Maximum Considered Earthquake
g = gravity
* The value is valid provided the requirements in Exception Note No. 2 in Section 11.4.8 of ASCE 7-16 are met. If not, a site-specific ground motion hazard analysis is required.

Liquefaction Potential

Liquefaction is a soil strength and stiffness loss phenomenon that typically occurs in loose, saturated cohesionless soils as a result of strong ground shaking during earthquakes. The potential for liquefaction at a site is usually determined based on the results of a subsurface geotechnical investigation and the groundwater conditions beneath the site. Hazards to buildings associated with liquefaction include bearing capacity failure, lateral spreading, and differential settlement of soils below foundations, which can contribute to structural damage or collapse.

A site-specific liquefaction hazard analysis was not included in our scope of services for this study. However, we reviewed available liquefaction hazards maps produced by the USGS in cooperation with the California Geological Survey (CGS), which characterize liquefaction susceptibility in select northern California counties. Our review revealed the Woodland area is not shown on the liquefaction hazard maps. The soil conditions encountered at the recent and previous explorations performed at or near the site and our experience in the Woodland area indicate the site is predominantly underlain by relatively stiff, fine-grained soils (lean clays and silts) or relatively dense, granular soils. These soils typically are resistant to liquefaction during earthquake ground shaking. In addition, to our knowledge, there have been no reported instances of liquefaction having occurred within the Woodland area during the major earthquake events of 1892 (Vacaville-Winters), 1906 (San Francisco), 1989 (Loma Prieta) and 2014 (West Napa). Based on this information, it is our opinion that the potential for liquefaction of the soils beneath the site is very low.

Soil Expansion Potential

Laboratory testing of two representative near-surface clay samples revealed these soils possess low plasticity when tested in accordance with the American Society of Testing and Materials (ASTM) D4318 test method (see Figure A1). Additional laboratory test results revealed Expansion Index values of 43 and 47, which is on the high end of the “low” expansion potential when tested in accordance with the ASTM D4829 test method (see Figure A2).

Specific recommendations for subgrade preparation and engineered fill construction are included in this report in this report to reduce the effect of expansive clay soils on the planned building and concrete slabs.

Soil Corrosion Potential

Two bulk samples of near-surface soil were submitted to Sunland Analytical for testing to determine pH, chloride and sulfate concentrations, and minimum resistivity to help evaluate the soils corrosion potential. This samples were collected during our recent preliminary geotechnical study of the property. The results of the corrosivity testing are summarized in Table 2 and copies of the analytical test reports are presented in Appendix A.

TABLE 2
SOIL CORROSIVITY TESTING

Analyte	Test Method	Sample Identification	
		D4 (0'-5')	D6 (0'-5')
pH	CA DOT 643 Modified*	7.44	7.44
Minimum Resistivity	CA DOT 643 Modified*	1,800 Ω-cm	1,630 Ω-cm
Chloride	CA DOT 417	5.8 ppm	3.1 ppm
Sulfate	CA DOT 422	23.4 ppm	13.3 ppm
Sulfate	ASTM D-516m	24.4 mg/kg	14.5 mg/kg

Notes : * = Small cell method
Ω-cm = Ohm-centimeters
ppm = Parts per million

The California Department of Transportation Corrosion and Structural Concrete Field Investigation Branch, *Corrosion Guidelines*, Version 3.0, dated March 2018, considers a site to be corrosive to foundation elements if one or more of the following conditions exists for the representative soil and/or water samples taken: has a chloride concentration greater than or equal to 500 ppm, sulfate concentration greater than or equal to 2000 ppm, or a pH of 5.5 or less. Based on the results of our testing, the soil tested is not considered to be corrosive to properly constructed foundation elements.

Table 19.3.1.1 – Exposure Categories and Classes, of American Concrete Institute (ACI) 318-14, Section 19.3 – Concrete Design and Durability Requirements, as referenced in Section 1904.1 of the 2013 CBC, indicates the severity of sulfate exposure for the sample tested is Exposure Class S0 (water-soluble sulfate concentration in contact with concrete is low and injurious sulfate attack is not a concern). Concrete design will ultimately need to be developed by a structural engineer, who should evaluate the requirements of ACI 318-14 and determine their applicability to the site.

Wallace-Kuhl & Associates are not corrosion engineers. Therefore, if it is desired to further define the soil corrosion potential at the site a corrosion engineer should be consulted.

Excavation Conditions

The surface and near-surface soils at the site should be readily excavatable with conventional earthmoving and trenching equipment.

Based on the borings performed at the site, excavations associated with building foundations, shallow trenches for utilities, and other excavations less than five feet deep associated with the planned construction, should stand vertically for short periods of time (i.e. less than one day) required for construction, unless cohesionless, saturated or disturbed soils are encountered. These unstable conditions may result in caving or sloughing; therefore, the contractor should be prepared to brace or shore the excavations, if necessary.

Excavations or trenches exceeding five feet in depth that will be entered by workers should be sloped, braced or shored to conform to current Occupational Safety and Health Administration (OSHA) requirements. The contractor must provide an adequately constructed and braced shoring system in accordance with federal, state and local safety regulations for individuals working in an excavation that may expose them to the danger of moving ground.

Temporarily sloped excavations less than 20 feet in depth (if any) should be constructed no steeper than a one and one half horizontal to one vertical (1½H:1V) inclination. Temporary slopes likely will stand at this inclination for the short-term duration of construction, provided significant pockets of loose and/or saturated granular soils are not encountered. Flatter slopes would be required if these conditions are encountered.

Excavated materials should not be stockpiled directly adjacent to an open excavation to prevent surcharge loading of the excavation sidewalls. Excessive truck and equipment traffic should be avoided near excavations. If material is stored or heavy equipment is stationed and/or operated near an excavation, a shoring system must be designed to resist the additional pressure due to the superimposed loads.

On-Site Soil Suitability for Engineered Fill Construction

The on-site soils encountered in our borings are considered suitable for use in engineered fill construction, provided these materials do not contain rubble, rubbish, significant organic concentrations, particles larger than three inches in maximum dimension, and are at a workable moisture content appropriate for compaction. Imported materials, if necessary, should be granular and approved by the Geotechnical Engineer prior to importing the materials to the site.

Pavement Subgrade Quality

Laboratory test results indicate the on-site soils are considered poor quality materials for the support of asphalt concrete pavements with Resistance ("R") values of 9 and 11, when tested in accordance with California Test 301 (see Figure A4). Based on these results, the near-surface clay soils anticipated to be encountered at pavement subgrade elevations are considered poor quality materials for support of asphalt concrete pavements and will require relatively thick pavement sections to compensate for the poor quality pavement support characteristics. It is our opinion an R-value of 5 is appropriate for design of pavements at the site supported on untreated subgrades.

Our experience indicates that chemical treatment of the soils can be used to improve the pavement subgrade support quality of the soil and reduce the required aggregate base material for pavements; reduce the moisture content of soils that are too wet to compact; and reduce the expansion potential of clay. Additional recommendations regarding lime-treatment of pavement subgrade soils are provided in the Pavement Design section of this report.

Groundwater Effect on Development

Groundwater was observed at a depth of approximately 17 feet below existing site grades in the borings performed on December 30, 2019. Based on review of available groundwater data and our field exploration, shallow groundwater can be anticipated at the site in deep trenches that exceed 15 to 20 feet below existing grades. Groundwater levels at the site should be expected to fluctuate throughout the year based on variations in seasonal precipitation, local pumping, the proximity to the ponds, and other factors.

If groundwater is encountered in deep trenches, the use of sumps, submersible pumps, deep wells or a well point system could be used as methods to lower the groundwater level. The dewatering method used will depend on the soil conditions, depth of the excavation and amount of groundwater present within the excavation. Dewatering, if required, should be the contractor's responsibility. The dewatering system should be designed and constructed by a dewatering contractor with local experience. We recommend the selected dewatering system lower the groundwater level to at least two feet below the bottom of the proposed excavations.

Seasonal Water

During the wet season, infiltrating surface runoff water can create saturated surface conditions. Grading operations attempted following the onset of winter rains and prior to prolonged drying periods will be hampered by high soil moisture contents. Such soils, intended for use as

engineered fill, will require considerable aeration and/or drying to reach a moisture content that will permit the soils to be properly compacted.

RECOMMENDATIONS

General

Grading plans were not available at the time this report was prepared; however, we anticipate that maximum excavations and fills on the order of five to ten feet are planned for the development of the site. The recommendations contained in this report are based upon this assumption. We consider it essential that our office review grading and structural foundation plans to verify the applicability of the following recommendations, and to provide supplemental recommendations, as conditions dictate.

Also, the recommendations presented below are appropriate for typical construction in the late spring through fall months. The on-site soils likely will be saturated by rainfall in the winter and early spring months and will not be compactable without drying by aeration or the addition of lime (or a similar product). Should the construction schedule require work to continue during the wet months, additional recommendations can be provided, as conditions warrant.

Site preparation should be accomplished in accordance with the provisions of this report. A representative of the Geotechnical Engineer should be present during site grading to evaluate compliance with our recommendations and the approved project plans and specifications. The Geotechnical Engineer of Record referenced herein should be considered the Geotechnical Engineer that is retained to provide geotechnical engineering observation and testing services during construction.

Site Clearing

Prior to grading, the planned construction areas should be cleared of all surface trash, rubble, and deleterious debris to expose firm and stable soils, as determined by the Geotechnical Engineer's representative. The area of removal should extend at least five feet beyond the edge of all exterior foundations or the footprint of the buildings, whichever is greater, and also at least five feet beyond any exterior flatwork or pavements, where practical. Any rubble and debris should be removed from the site.

Any existing underground utilities designated to be removed or relocated should include removal of all trench backfill and bedding materials. The resulting excavations should be restored with engineered fill placed and compacted in accordance with the recommendations included in this report.

Surface vegetation/organics and organically laden soil within construction areas should be stripped from the site. Debris from the stripping should not be used in general fill construction areas supporting buildings, concrete slabs, pavements and any other surface improvements. With prior approval from the Geotechnical Engineer, strippings may be used in landscape areas, provided they are kept at least five feet from the building pads, pavements, concrete slabs and any other surface improvements, and are moisture conditioned, and compacted.

Discing of the organics into the surface soils may be a suitable alternate to stripping, depending on the condition and quantity of the organics at the time of grading. The decision to utilize discing in lieu of stripping should be made by the Geotechnical Engineer, or his representative, at the time of earthwork construction. Discing operations, if approved, should be observed by the Geotechnical Engineer's representative, and be continuous until the organics are adequately mixed into the surface soils to provide a compactable mixture of soil containing minor amounts of organic matter. Pockets or concentrations of organics will not be allowed.

Ponds and low-lying areas designated to be backfilled should be cleaned of organics (if present) and excavated to a firm, stable subgrade, as verified by our representative. Recommendations for stabilizing the bottom of the excavation can be provided at the time of construction. Engineered fill placed in the pond should be placed in thin lifts as recommended in the Site Preparation and Engineered Fill Construction section of this report.

Depressions resulting from site clearing operations, as well as any loose, soft, disturbed, saturated, or organically contaminated soils, as identified by the Geotechnical Engineer's representative, should be cleaned out to firm, undisturbed soils and backfilled with engineered fill in accordance with the recommendations of this report. It is important that the Geotechnical Engineer's representative be present during clearing operations to verify adequate removal of the surface and subsurface items, as well as the proper backfilling of resulting excavations.

Compaction should be performed using a heavy, self-propelled, sheepsfoot compactor capable of achieving the required compaction. Difficulty in achieving subgrade compaction may be an indication of loose, soft or unstable soil conditions associated with prior site development such as the drainage canals or other water retention features. Should these conditions exist, the materials should be excavated to check for subsurface structures and the excavations backfilled with engineered fill in accordance with the recommendations included in this report. We

recommend that construction bid documents include a unit price (per cubic yard) for all additional excavation required to remove unanticipated materials, as determined by the Geotechnical Engineer's representative, and replaced with engineered fill.

Site Preparation and Engineered Fill Construction

Following site clearing activities, construction areas to receive fill, achieved by excavation or remain at grade, should be scarified in place to a depth of at least 12 inches, thoroughly moisture conditioned to at least two percent above the optimum moisture content, and uniformly compacted to not less than 90 percent relative compaction. Relative compaction should be based on the maximum dry density as determined in accordance with the ASTM D1557 Test Method.

On-site soils are considered suitable for use in engineered fill construction, do not contain significant concentrations of organic materials, rubble or debris. Imported fill materials, if required, should be similar to but less expansive than native soils; and, do not contain of particles greater than three inches in maximum dimension, and be within a compactable moisture content. Imported fill should be observed and approved by the Geotechnical Engineer prior to being transported to the site. Also, if import fills are required (other than aggregate base), the contractor must provide appropriate documentation that the import is clean of known contamination and within acceptable corrosion limits.

Engineered fill should be placed in lifts not exceeding six inches in compacted thickness with each lift being uniformly moisture conditioned to at least two percent over the optimum moisture content and compacted to not less than 90 percent of the maximum dry density per ASTM D1557 for fills placed within five feet of the final subgrade elevation, and compacted to not less than 95 percent of the maximum dry density for fills placed deeper than five feet below final subgrade elevation.

The upper 12 inches of final building pad subgrades should be uniformly moisture conditioned to at least two percent above the optimum moisture content and uniformly compacted to at least 90 percent of the maximum dry density, regardless of whether final grade is completed by excavation, filling, or left at-grade.

The upper six inches of final pavement subgrades should be uniformly moisture conditioned to at least the optimum moisture content, and uniformly compacted to at least 95 percent of the maximum dry density, regardless of whether final grade is completed by excavation, filling, or left at existing grade. Final subgrade preparation and compaction should be performed just prior to placement of aggregate base, after underground construction is complete.

Permanent excavation and fill slopes should be constructed no steeper than two horizontal to one vertical (2H:1V). Permanent slopes should be overbuilt and trimmed to provide a compacted slope face. Slopes should be re-vegetated as soon as possible to minimize erosion. As a minimum, erosion control measures including placement of straw bale sediment barriers or construction of silt filter fences in areas where surface run-off may be concentrated should be considered. Slopes should be over-built and cutback to design grades and inclinations.

Site preparation should be accomplished in accordance with the recommendations of this section and the *Earthwork Specifications* provided in Appendix B. A representative of the Geotechnical Engineer should be present during site preparation and all grading operations to observe and test the fill to verify compliance with these recommendations and the project specifications.

Utility Trench Backfill

Utility trench backfill within structural areas should be mechanically compacted as engineered fill in accordance with the following recommendations. Bedding of utilities and initial backfill around and over the pipe should be in accordance with the manufacturer's recommendations for the pipe materials selected, and applicable City of Woodland requirements.

Only native soils (in lieu of select gravel or sand backfill) should be used as general backfill for utility trenches located within the building footprints and where trenches cross from landscape areas to structural areas (buildings, areas supporting exterior flatwork, driveways, etc.) to help minimize soil moisture variations beneath the structures. The native soil backfill should extend at least three feet horizontally inside and outside the perimeter foundation lines.

Utility trench backfill should be placed in thin lifts, moisture conditioned to at least the optimum moisture content for granular soils, at least two percent above the optimum moisture content for clay soils, and mechanically compacted to at least 90 percent of the maximum dry density as determined by ASTM D1557. Lift thickness will depend on the type of compaction equipment utilized during construction. The upper six inches of utility backfill within the limits of pavements should be compacted to at least 95 percent relative compaction at a minimum of the optimum moisture content. Trench backfill materials and compaction within City streets should conform to the applicable portions of the current Yolo County Standards, latest edition. Utility trench backfill should be continuously observed and tested during construction.

We recommend that underground utility trenches, which are aligned nearly parallel with foundations, be at least three feet from the outer edge of foundations. Trenches should not encroach into the zone extending outward at a 1H:1V inclination below the bottom of the foundations. Trenches near foundations should not remain open longer than 72 hours to prevent drying and formation of desiccation and shrinkage cracks. The intent of these recommendations is to prevent loss of both lateral and vertical support of foundations, resulting in possible settlement.

Foundation Design

Based upon results of our study and our knowledge and experience with similar projects in the area, the proposed single-story residential structures can be supported on conventional foundations with interior concrete slabs-on-grade or post-tensioned (PT) slabs. At this time, we assume that deepened conventional foundations are desired. Recommendations for PT slabs can be provided upon request.

The proposed residential structures may be supported upon continuous and isolated spread foundations that extend at least 12 inches into the compacted building pad, as measured from lowest adjacent soil grade. For this project, the lowest adjacent soil grade is defined as the soil surface on which capillary break material is placed. A continuous, reinforced foundation should be utilized for the perimeter of the structures to reduce the potential for moisture infiltration beneath the interior slab-on-grade of the structures. Continuous foundations should be at least 12 inches wide; isolated spread foundations should maintain a minimum 18-inch dimension.

Foundations bearing in firm undisturbed or recompacted native soils, engineered fill, or a combination of those materials may be sized for maximum allowable “net” soil pressure of 2,000 pounds per square foot (psf) for dead load plus live load with a 1/3 increase for consideration of seismic or wind forces. The weight of the foundation concrete extending below soil grade may be disregarded in sizing computations.

We recommend that all foundations be reinforced to provide structural continuity, mitigate cracking and permit spanning of local soil irregularities. The structural engineer should determine final foundation reinforcing requirements.

Resistance to lateral displacement of shallow foundations may be computed using an allowable friction factor of 0.25 multiplied by the effective vertical load on each foundation. Additional lateral resistance may be achieved using an allowable passive earth pressure against the vertical projection of the foundation equal to an equivalent fluid pressure of 250 psf per foot of depth. These two modes of resistance should not be added unless the frictional component is

reduced by 50 percent since mobilization of the passive resistance requires some horizontal movement, effectively reducing the frictional resistance.

Interior Floor Slab Support

Interior concrete slab-on-grade floors can be supported upon the soil subgrade prepared in accordance with the recommendations in this report and maintained in that condition (at least the optimum moisture). Slabs-on-grade should be at least four inches thick, and final thickness, reinforcement and joint spacing should be determined by the slab designer. Proper and consistent location of the reinforcement near mid-slab is essential to its performance. The risk of uncontrolled shrinkage cracking is increased if the reinforcement is not properly located within the slab.

Floor slabs should be underlain by a layer of free-draining crushed rock, serving as a deterrent to migration of capillary moisture. The crushed rock layer should be at least four inches thick and graded such that 100 percent passes a one-inch sieve and no appreciable amount passes a No. 4 sieve. Additional moisture protection may be provided by placing a vapor retarder membrane (at least 10-mils thick) directly over the crushed rock. The membrane should meet or exceed the minimum specifications as outlined in ASTM E1745 and be installed in strict conformance with the manufacturer's recommendations.

Floor slab construction over the past 30 years or more has included placement of a thin layer of sand or pea gravel over the vapor retarder membrane. The intent of the sand or pea gravel is to aid in the proper curing of the slab concrete. However, recent debate over excessive moisture vapor emissions from floor slabs includes concern for water trapped within the sand/pea gravel. Therefore, we consider the use of the sand/pea gravel layer as optional. The concrete curing benefits should be weighed against efforts to reduce slab moisture vapor transmission.

Due to the presence of expansive soils, moisture conditioning of subgrade soils prior to placement of floor slab concrete is considered essential. Immediately prior to slab concrete placement, the subgrade soils, to a depth of least 12 inches, should be brought to a uniform, near-saturated moisture condition by liberal watering or sprinkling. Slab subgrade moisture condition should be field checked by our representative for each building pad within 48 hours prior to slab placement. Due to saturation of these upper soils, it is imperative that moisture vapor penetration resistance techniques be utilized in design and construction of interior floor slabs.

The recommendations presented above are intended to mitigate any significant soils-related cracking of the slab-on-grade floors. More important to the performance and appearance of a Portland cement concrete slab is the quality of the concrete, the workmanship of the concrete contractor, the curing techniques utilized, and the spacing of control joints.

Floor Slab Moisture Penetration Resistance

It is considered likely that interior floor slab subgrade soils will become wet to near-saturated at some time during the life of the structures. This is a certainty when slabs are constructed during the wet season or when constantly wet ground or poor drainage conditions exist adjacent to structures. For this reason, it should be assumed that all slabs in living areas, as well as those intended for moisture-sensitive floor coverings or materials, require protection against moisture or moisture vapor penetration. Standard practice includes the crushed rock and water vapor retarder as suggested above. However, the crushed rock and membrane offer only a limited, first-line of defense against soil-related moisture. Recommendations contained in this report concerning foundation and floor slab design are presented as *minimum* requirements, only from the geotechnical engineering standpoint.

It is emphasized that the use of sub-slab crushed rock and vapor retarder membrane will not "moisture proof" the slab, nor does it assure that slab moisture transmission levels will be low enough to prevent damage to floor coverings or other building components. If increased protection against moisture vapor penetration of slabs is desired, a concrete moisture protection specialist should be consulted. The design team should consider all available measures for slab moisture protection. It is commonly accepted that maintaining the lowest practical water-cement ratio in the slab concrete is one of the most effective ways to reduce future moisture vapor penetration of the completed slabs.

Retaining Wall Design Parameters

Foundations for retaining walls less than five feet in height and not structurally connected to the proposed structures should be supported on a continuous foundation at least 12 inches wide, extending at least 18 inches below lowest adjacent soil grade. Continuous footings for retaining walls may be designed based on an allowable bearing capacity of 2,500 pounds psf for dead plus live load conditions. The allowable bearing capacity may be increased by one-third for effects of wind or seismic forces.

Retaining walls that will be allowed to slightly rotate about their base (unrestrained at the top or sides) should be capable of resisting "active" lateral earth pressure equal to an equivalent fluid pressure of 40 psf per foot of wall backfill for horizontal granular backfill and fully-drained

conditions. Retaining walls that are fixed at the top should be capable of resisting "at-rest" lateral earth pressure equal to an equivalent fluid pressure of 60 psf per foot of wall backfill, again assuming horizontal backfill and fully-drained conditions. Walls supporting sloping backfill, up to a 2H:1V inclination, should be designed by adding an additional 20 psf per foot of wall to the pressures presented above.

Backfill behind retaining walls should be fully drained to prevent the build-up of hydrostatic pressures behind the wall. Retaining walls should be provided with a drainage blanket consisting of either Class 2 permeable material (Caltrans Specification Section 68-1.025) at least one foot wide, or proprietary geocomposite drainage board, extending from the base of wall to within one foot below the top of the wall. The top foot above the drainage layer should consist of compacted on-site materials, unless covered by a slab or pavement. Weep holes or perforated rigid pipe, as appropriate, should be provided at the base of the wall to collect accumulated water. Drainpipes, if used, should slope to discharge at no less than a one percent fall to suitable drainage facilities. Open-graded ½- to ¾-inch crushed rock may be used in lieu of the Class 2 permeable material, if the rock and drain pipe are completely enveloped in an approved non-woven geotextile filter fabric (Mirafi 140N or equivalent).

Wall backfill should consist of granular soils compacted to about 90 percent of the maximum dry density as determined by ASTM D1557. Over-compacting of wall backfill should be avoided. Wall backfilling of reinforced concrete retaining wall should not begin until the wall concrete has reached a certain strength as determined by the project Structural Engineer.

Exterior Flatwork

The upper 12 inches of final soil subgrade for exterior concrete flatwork areas should consist of approved, imported, compactable, very low-expansive (Expansion Index ≤ 20) granular soils or lime-treated on-site clay soils placed and compacted in accordance with the Engineered Fill Construction recommendations included in this report. Exterior flatwork subgrade soils should be maintained in a moist condition and protected from disturbance. Exterior flatwork should be underlain by at least four inches of aggregate base compacted to at least 95 percent relative compaction. The aggregate base should be placed over the 12 inches of very low-expansive granular soils or lime-treated soils.

Exterior flatwork concrete should be at least four inches thick. Consideration should be given to thickening the edges of the slabs at least twice the slab thickness where wheel traffic is expected over the slabs. Expansion joints should be provided to allow for minor vertical movement of the flatwork. Exterior flatwork should be constructed independent of other structural elements by the placement of a layer of felt material between the flatwork and the

structural element. The slab designer should determine the final thickness, strength and joint spacing of exterior slab-on-grade concrete. The slab designer should also determine if slab reinforcement for crack control is required and determine final slab reinforcing requirements.

Areas adjacent to exterior flatwork should be landscaped to maintain more uniform soil moisture conditions adjacent to and under flatwork. We recommend final landscaping plans not allow fallow ground adjacent to exterior concrete flatwork.

Practices recommended by the Portland Cement Association (PCA) for proper placement, curing, joint depth and spacing, construction, and placement of concrete should be followed during exterior concrete flatwork construction.

Drought Considerations

The soils at the site are considered expansive. These soils swell when the moisture content increases and shrink when the soil moisture content decreases. It will be essential that the soil moisture content under and near foundations and exterior concrete flatwork remain relatively constant to mitigate the potential for heaving or settling of the foundation and slabs.

The State of California can experience extended periods of severe drought. The ability for property owners to use irrigation as a means for maintaining landscape vegetation and soil moisture may be inhibited for unpredictable periods of time. For this reason, landscape and hardscape systems for this development should be carefully planned to prevent the desiccation of soils under and near foundations and slabs. Trees with invasive shallow root systems should be avoided. No trees or large shrubs that could remove soil moisture during dry periods should be planted within five feet of any foundation or slab. Fallow ground adjacent to foundations must be avoided.

To reduce potential for loss of lateral support adversely affecting residential foundations or exterior flatwork, a minimum horizontal distance of five feet should be provided and maintained between the outside edge of the foundation or flatwork to the nearest adjacent slope (e.g. building pad hinge point), for slopes greater than two feet in height.

Site Drainage

Final site grading should be accomplished to provide positive drainage of surface water away from structures and prevent ponding of water adjacent to foundations, slabs or pavements. The grade adjacent to structures should be sloped away from foundations at a minimum two percent

slope for a distance of at least five feet, where possible. Roof gutter downspouts and surface drains should drain onto flatwork or be connected to rigid non-perforated piping directed to an appropriate drainage point away from the structures. Ponding of surface water should not be allowed adjacent to the buildings or pavements. Landscape berms, if planned, should not be constructed in such a manner as to promote drainage toward structures.

Pavement Design

The following pavement sections have been calculated based on the results of R-value testing. The procedures used for design are in general conformance with Chapters 600 to 670 of the 2016 California Highway Design Manual, 6th edition. An R-value of 5 was used for the design of on-site pavements constructed on native soil. The project civil engineer should determine the appropriate traffic index based on anticipated traffic conditions. We can provide alternate pavement sections based on different traffic indices, upon request.

TABLE 3
PAVEMENT DESIGN ALTERNATIVES

Traffic Index (TI)	Untreated Pavement Subgrade, R-value = 5		Lime-treated Pavement Subgrade (a) R-value = 40	
	Type B Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)	Type B Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)
4.5	2½	10	2½*	4
	3*	9	---	---
5.5	2½	13	2½	7
	3*	12	3*	6
6.5	3	16	3½	8
	4*	14	4*	7

Notes: * = Asphalt concrete thickness includes the Caltrans Safety Factor
(a) = Lime-treated subgrade should be at least 12 inches thick and possess a minimum R-value of 40 when tested in accordance with CT 301.

We emphasize that the performance of pavements is critically dependent upon uniform and adequate compaction of the soil subgrade, as well as all engineered fill and utility trench backfill within the limits of the pavements. Pavement subgrade preparation, i.e. scarification, moisture conditioning and compaction, should be performed after underground utility construction is completed and just prior to aggregate base placement. The upper six inches of pavement

subgrade soils should be compacted to at least 95 percent relative compaction at no less than the optimum moisture content. Pavement subgrades should be proof-rolled with a fully-loaded, water truck prior to placement of aggregate base to identify soft/unstable areas that may require removal and re-compaction. All aggregate base should be compacted to at least 95 percent of the maximum dry density. Placement of aggregate base upon completed pavement subgrades should be accomplished within 72 hours to prohibit significant drying of the subgrade soils. Materials quality and construction of the structural section should conform to the applicable provisions of the *Caltrans Standard Specifications* and the Yolo County Standards, latest editions.

Portland cement concrete pavements for driveways should be at least four inches thick and supported on a compacted soil subgrade and at least six inches of compacted Class 2 aggregate base. Reinforcing for crack control should be provided, if desired, and determined by the project structural engineer. Reinforcement must be located at mid-slab depth to be effective. Joint spacing and details should conform to the current PCA or ACI guidelines. Portland cement concrete should achieve a minimum compressive strength of 3500 pounds per square inch at 28 days.

Pavement Drainage

Efficient drainage of all surface water to avoid infiltration and saturation of the supporting aggregate base and subgrade soils is important to pavement performance. Weep holes could be provided at drainage inlets, located at the subgrade/base interface, to allow accumulated water to drain from beneath the pavements.

Geotechnical Engineering Observation and Testing During Earthwork

Site preparation should be accomplished in accordance with the recommendations of this report. Geotechnical testing and observation during construction is considered a continuation of our geotechnical engineering investigation. Wallace-Kuhl & Associates should be retained to provide testing and observation services during site preparation, earthwork, and foundation construction at the project to verify compliance with this geotechnical report and the project plans and specifications and to provide consultation as required during construction. These services are beyond the scope of work authorized for this investigation. We would be pleased to submit a proposal to provide these services upon request.

Section 1803.5.8 "Compacted Fill Material" of the 2019 CBC requires that the geotechnical engineering report provide a number and frequency of field compaction tests to determine compliance with the recommended minimum compaction. Many factors can affect the number of tests that should be performed during the course of construction, such as soil type, soil moisture, season of the year and contractor operations/performance. Therefore, it is crucial that the actual number and frequency of testing be determined by the Geotechnical Engineer during construction based on their observations, site conditions, and difficulties encountered.

In the event that Wallace-Kuhl & Associates is not retained to provide geotechnical engineering observation and testing services during construction, the Geotechnical Engineer retained to provide these services should indicate in writing that they agree with the recommendations of this report, or prepare supplemental recommendations as necessary. A final report by the "Geotechnical Engineer" should be prepared upon completion of the project.

Future Services

We recommend that Wallace-Kuhl & Associates be retained to review the final plans and specifications to determine if the intent of our recommendations has been implemented in those documents. We would be pleased to submit a proposal to provide these services upon request.

LIMITATIONS

Our recommendations are based upon the information provided regarding the proposed project, combined with our analysis of site conditions revealed by the field exploration and laboratory testing programs. We have used our engineering judgment based upon the information provided and the data generated from our study. This report has been prepared in substantial compliance with generally accepted geotechnical engineering practices that exist in the area of the project at the time the report was prepared. No warranty, either express or implied, is provided.

If the proposed construction is modified or relocated; or, if it is found during construction that subsurface conditions differ from those we encountered at the boring locations, we should be afforded the opportunity to review the new information or changed conditions to determine if our conclusions and recommendations must be modified.

We emphasize that this report is applicable only to the proposed construction and the investigated site. This report should not be utilized for construction on any other site. This report is considered valid for the proposed construction for a period of two years following the date of this report. If construction has not started within two years, we must re-evaluate the recommendations of this report and update the report, if necessary.

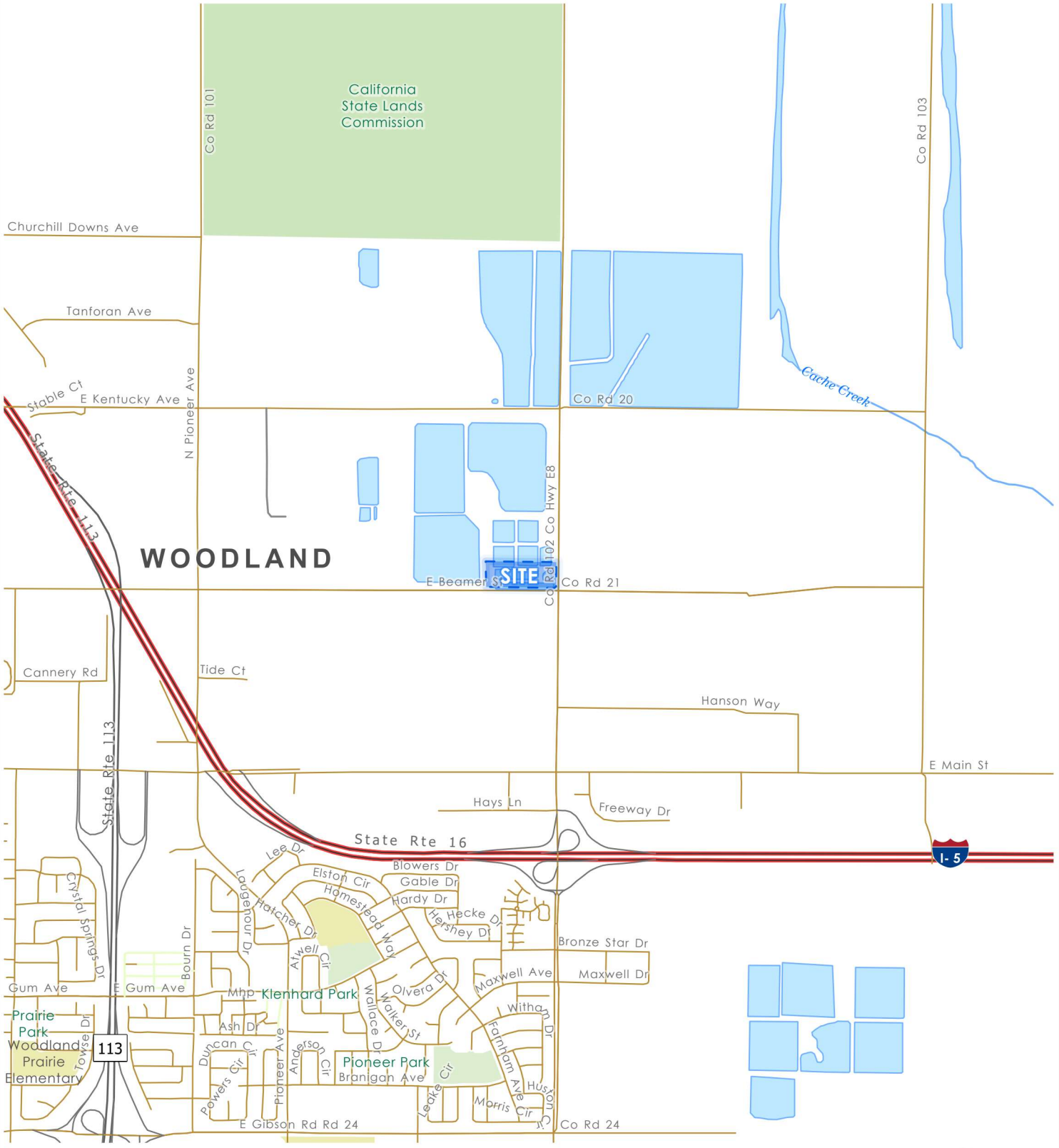
Wallace - Kuhl & Associates

Derek Bays
Staff Geologist

Michael M. Watari
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
MICHAEL M. WATARI
NO. 2675
Exp. 12-31-21
GEOTECHNICAL
STATE OF CALIFORNIA
1/29/20

DB:MMW



Spatial Data provided by Esri, NOAA, and USGS.
Projection: NAD 83, California State Plane, Zone II.

WallaceKuhl & ASSOCIATES

VICINITY MAP

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	1
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO.12185.02P



Aerial imagery provided by Esri.
Projection: NAD 83, California State Plane, Zone II.

WallaceKuhl & ASSOCIATES

SITE PLAN

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	2
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20
WKA NO. 12185.02P	

Project: East Beamer Street Housing Project
Project Location: Woodland, California
WKA Number: 12185.02P

LOG OF SOIL BORING D1

Sheet 1 of 1

Date(s) Drilled	**12/30/19**	Logged By	**KRL**	Checked By	**DMB**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**Taber Drilling**	Total Depth of Drill Hole	**21.5 feet**
Drill Rig Type	**Track Rig**	Diameter(s) of Hole, inches	**4"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet	**17.0**	Sampling Method(s)	**2.0" Modified California with 6-inch sleeve**	Drill Hole Backfill	**Neat Cement**
Remarks	**Bulk @ 0'-5'; EI, PI**			Driving Method and Drop	**140lb auto. hammer with 30" drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE NUMBER	NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	DRY UNIT WEIGHT, pcf	ADDITIONAL TESTS
			Dark brown, moist, hard, lean CLAY (CL)						
					D1-1I	25	21.2	95	PP=4.25 UCC=1.57
	5		medium stiff		D1-2I	7	27.2	94	PP=2.0
	10				D1-3I	27	18.2	107	PP=3.25
			Dark olive, wet, loose, clayey fine SAND (SC)						
	15				D1-4I	11	24.4	99	
			Dark grey, wet, medium dense, GRAVEL (GP)						
	20				D1-5I	22	24.3	99	
			Boring was terminated at approximately 21½ feet below existing ground surface. Groundwater was encountered at approximately 17 feet below ground surface.						

BORING LOG 12185.02P - EAST BEAMER STREET HOUSING PROJECT.GPJ WKA.GDT 1/27/20 6:06 PM

Wallace Kuhl & ASSOCIATES

FIGURE 3

Project: East Beamer Street Housing Project
Project Location: Woodland, California
WKA Number: 12185.02P

LOG OF SOIL BORING D2

Sheet 1 of 1

Date(s) Drilled	**12/30/19**	Logged By	**KRL**	Checked By	**DMB**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**Taber Drilling**	Total Depth of Drill Hole	**21.5 feet**
Drill Rig Type	**Track Rig**	Diameter(s) of Hole, inches	**4"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet	**20.0**	Sampling Method(s)	**2.0" Modified California with 6-inch sleeve**	Drill Hole Backfill	**Neat Cement**
Remarks				Driving Method and Drop	**140lb auto. hammer with 30" drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE NUMBER	NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	DRY UNIT WEIGHT, pcf	ADDITIONAL TESTS
			Dark olive-brown, moist, medium stiff, lean CLAY with silt (CL)						
					D2-1I	8	19.1	97	PP=1.5
	5				D2-2I	8	9.7	94	
			Olive-brown, moist, loose, clayey fine SAND (SC)						
			Dark brown, very moist, stiff, lean CLAY (CL)						
	10				D2-3I	12	26.5	92	PP=1.0
			less moist, very stiff						
	15				D2-4I	18	29.2	89	
			Dark brown, wet, medium dense, fine clayey SAND (SC)						
	20				D2-5I	21	15.6	110	
			Dark brown, wet, medium dense, fine to coarse GRAVEL (GP)						
			Boring was terminated at approximately 21½ feet below existing ground surface. Groundwater was encountered at approximately 20 feet below ground surface.						

BORING LOG 12185.02P - EAST BEAMER STREET HOUSING PROJECT.GPJ WKA.GDT 1/27/20 6:06 PM

Wallace Kuhl & ASSOCIATES

FIGURE 4

Project: East Beamer Street Housing Project
Project Location: Woodland, California
WKA Number: 12185.02P

LOG OF SOIL BORING D3

Sheet 1 of 1

Date(s) Drilled	**12/30/19**	Logged By	**KRL**	Checked By	**DMB**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**Taber Drilling**	Total Depth of Drill Hole	**21.5 feet**
Drill Rig Type	**Track Rig**	Diameter(s) of Hole, inches	**4"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet	**17.5**	Sampling Method(s)	**2.0" Modified California with 6-inch sleeve**	Drill Hole Backfill	**Neat Cement**
Remarks	**Bulk @ 0'-5'; RV**			Driving Method and Drop	**140lb auto. hammer with 30" drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE NUMBER	NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	DRY UNIT WEIGHT, pcf	ADDITIONAL TESTS
			Dark grey, moist, stiff, lean CLAY (CL) with fine sand						
					D3-1I	15			PP>4.5
	5		olive with red mottling						
					D3-2I	10	16.7	89	PP=4.0
	10		dark grey-brown, very stiff						
					D3-3I	19	21.4	99	PP=2.75
			soft						
	15				D3-4I	13	25.1	95	PP=0.5
			Grey, very moist, medium dense, fine SAND (SP) with gravel						
			Grey, wet, medium dense, sandy GRAVEL (GP)						
	20				D3-5I	32			
			Boring was terminated at approximately 21½ feet below existing ground surface. Groundwater was encountered at approximately 17½ feet below ground surface.						

BORING LOG 12185.02P - EAST BEAMER STREET HOUSING PROJECT.GPJ WKA.GDT 1/27/20 6:06 PM

Wallace Kuhl & ASSOCIATES

FIGURE 5

Project: East Beamer Street Housing Project
Project Location: Woodland, California
WKA Number: 12185.02P

LOG OF SOIL BORING D4

Sheet 1 of 1

Date(s) Drilled	**12/30/19**	Logged By	**KRL**	Checked By	**DMB**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**Taber Drilling**	Total Depth of Drill Hole	**16.5 feet**
Drill Rig Type	**Track Rig**	Diameter(s) of Hole, inches	**4"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet	**Not Encountered**	Sampling Method(s)	**2.0" Modified California with 6-inch sleeve**	Drill Hole Backfill	**Neat Cement**
Remarks				Driving Method and Drop	**140lb auto. hammer with 30" drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE NUMBER	NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	DRY UNIT WEIGHT, pcf	ADDITIONAL TESTS
			Grey, moist, stiff, sandy CLAY (CL)						
					D4-1I	9	13.5	98	PP=3.75
			Brown, moist, loose, clayey fine SAND (SC)						
	5				D4-2I	12	17.7	92	
			Dark brown, moist, very stiff, silty lean CLAY (CL)						
	10				D4-3I	18	23.5	97	PP=2.25
			Dark brown, moist, medium dense, sandy fine to coarse GRAVEL (GP)						
	15				D4-4I	24	8.5	120	
			Boring was terminated at approximately 16½ feet below existing ground surface. Groundwater was not encountered.						

BORING LOG 12185.02P - EAST BEAMER STREET HOUSING PROJECT.GPJ WKA.GDT 1/27/20 6:06 PM

Wallace Kuhl & ASSOCIATES

FIGURE 6

Project: East Beamer Street Housing Project
Project Location: Woodland, California
WKA Number: 12185.02P

LOG OF SOIL BORING D5

Sheet 1 of 1

Date(s) Drilled	**12/30/19**	Logged By	**KRL**	Checked By	**DMB**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**Taber Drilling**	Total Depth of Drill Hole	**21.5 feet**
Drill Rig Type	**Track Rig**	Diameter(s) of Hole, inches	**4"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet	**20.0**	Sampling Method(s)	**2.0" Modified California with 6-inch sleeve**	Drill Hole Backfill	**Neat Cement**
Remarks	**Bulk @ 0'-5'; EI, PI**			Driving Method and Drop	**140lb auto. hammer with 30" drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE NUMBER	NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	DRY UNIT WEIGHT, pcf	ADDITIONAL TESTS
			Dark grey-brown, very moist, stiff, lean CLAY (CL)						
					D5-1I	17			PP=2.25
	5		less moist, very stiff		D5-2I	21			PP>4.5
			dark grey						
	10		light grey-brown, more moist, medium stiff		D5-3I	7			PP=1.25
	15				D5-4I	26			PP=3.75
			Dark grey-brown, wet, medium dense, clayey fine SAND (SC)						
	20				D5-5I	16			
			Boring was terminated at approximately 21½ feet below existing ground surface. Groundwater was encountered at approximately 20 feet below ground surface.						

BORING LOG 12185.02P - EAST BEAMER STREET HOUSING PROJECT.GPJ WKA.GDT 1/27/20 6:06 PM

Wallace Kuhl & ASSOCIATES

FIGURE 7

Project: East Beamer Street Housing Project
Project Location: Woodland, California
WKA Number: 12185.02P

LOG OF SOIL BORING D6

Sheet 1 of 1

Date(s) Drilled	**12/30/19**	Logged By	**KRL**	Checked By	**DMB**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**Taber Drilling**	Total Depth of Drill Hole	**16.5 feet**
Drill Rig Type	**Track Rig**	Diameter(s) of Hole, inches	**4"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet	**Not Encountered**	Sampling Method(s)	**2.0" Modified California with 6-inch sleeve**	Drill Hole Backfill	**Neat Cement**
Remarks	**Bulk @ 0'-5'; RV**			Driving Method and Drop	**140lb auto. hammer with 30" drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE NUMBER	NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	DRY UNIT WEIGHT, pcf	ADDITIONAL TESTS
			Dark grey, very moist, medium stiff, lean CLAY (CL)						
					D6-1I	8			PP=0.5
	5		fine gravel encountered						
					D6-2I	6	19.8	99	PP=1.25
			no gravel observed						
	10				D6-3I	11	26.6	90	PP=1.25
			less moist, stiff						
	15				D6-4I	15	26.9	89	PP=2.0
			Boring was terminated at approximately 16½ feet below existing ground surface. Groundwater was not encountered.						

BORING LOG 12185.02P - EAST BEAMER STREET HOUSING PROJECT.GPJ WKA.GDT 1/27/20 6:06 PM

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FIGURE 8

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487)

MAJOR DIVISIONS		USCS[4]	CODE	CHARACTERISTICS
COARSE GRAINED SOILS (More than 50% of soil > no. 200 sieve size)	GRAVELS[1] (More than 50% of coarse fraction > no. 4 sieve size)	GW		Well-graded gravels or gravel - sand mixtures, trace or no fines
		GP		Poorly graded gravels or gravel - sand mixtures, trace or no fines
		GM		Silty gravels, gravel - sand - silt mixtures, containing little to some fines[2]
		GC		Clayey gravels, gravel - sand - clay mixtures, containing little to some fines[2]
	SANDS[1] (50% or more of coarse fraction < no. 4 sieve size)	SW		Well-graded sands or sand - gravel mixtures, trace or no fines
		SP		Poorly graded sands or sand - gravel mixtures, trace or no fines
		SM		Silty sands, sand - gravel - silt mixtures, containing little to some fines[2]
		SC		Clayey sands, sand - gravel - clay mixtures, containing little to some fines[2]
FINE GRAINED SOILS (50% or more of soil < no. 200 sieve size)	SILTS & CLAYS LL < 50	ML		Inorganic silts, gravely silts, and sandy silts that are non-plastic or with low plasticity
		CL		Inorganic lean clays, gravelly lean clays, sandy lean clays of low to medium plasticity[3]
		OL		Organic silts, organic lean clays, and organic silty clays
	SILTS & CLAYS LL ≥ 50	MH		Inorganic elastic silts, gravelly elastic silts, and sandy elastic silts
		CH		Inorganic fat clays, gravelly fat clays, sandy fat clays of medium to high plasticity
		OH		Organic fat clays, gravelly fat clays, sandy fat clays of medium to high plasticity
HIGHLY ORGANIC SOILS		PT		Peat
ROCK		RX		Rocks, weathered to fresh
FILL		FILL		Artificially placed fill material

OTHER SYMBOLS

= Drive Sample: 2-1/2" O.D. Modified California sampler

= Drive Sampler: no recovery

= SPT Sampler

= Initial Water Level

= Final Water Level

— — — = Estimated or gradational material change line

——— = Observed material change line

Laboratory Tests

CR = Corrosion
PI = Plasticity Index
EI = Expansion Index
UCC = Unconfined Compression Test (TSF)
TR = Triaxial Compression Test
GR = Gradational Analysis (Sieve/Hydro)
FC = Wash (Fines Content)
PP = Pocket Penetrometer Test (TSF)
PID = Photo Ionization Detector Test (PPM)
RV = Resistance ("R") Value

REF = Refusal (>50 blows in 6 inches)

GRAIN SIZE CLASSIFICATION

CLASSIFICATION	RANGE OF GRAIN SIZES	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS (b)	Above 12"	Above 300
COBBLES (c)	12" to 3"	300 to 75
GRAVEL (g) coarse fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	75 to 4.75 75 to 19 19 to 4.75
SAND coarse medium fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.75 to 0.075 4.75 to 2.00 2.00 to 0.425 0.425 to 0.075
SILT & CLAY	Below No. 200	Below 0.075

Trace - Less than 5 percent
Few - 5 to 10 percent
Little - 15 to 25 percent
Some - 35 to 45 percent
Mostly - 50 to 100 percent

* Percents as given in ASTM D2488

NOTES:

1. Coarse grained soils containing 5% to 12% fines, use dual classification symbol (ex. SP-SM).
2. If fines classify as CL-ML (4<PI<7), use dual symbol (ex. SC-SM).
3. Silty Clays, use dual symbol (CL-ML).
4. Borderline soils with uncertain classification list both classifications (ex. CL/ML).

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UNIFIED SOIL CLASSIFICATION SYSTEM

East Beamer Street Housing Project

Woodland, California

FIGURE	9
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	1/20
WKA NO. 12185.02P	

APPENDICES

APPENDIX A
General Project Information, Laboratory Testing and Results

APPENDIX A

A. GENERAL INFORMATION

The performance of a geotechnical engineering study for the proposed East Beamer Street Housing Project to be constructed northwest of the intersection of East Beamer Street and County Road 102 in Woodland, California, was authorized by Mr. Stephen Coyle of the City of Woodland Community Development on December 2, 2019.

Authorization was for a design-level geotechnical study as described in our proposal letter dated September 7, 2019, sent to our client, City of Woodland Community Development, whose mailing address is 300 1st Street in Woodland, California 95695; telephone (530) 661-5910.

The project Civil Engineer is Laugenour and Meikle, whose mailing address is 608 Court Street, Woodland, California 95695; telephone (530) 662-1755.

In preparing this report we referenced a December 18, 2018 *CPublic Improvement Plans for East Beamer Street Housing Project* prepared by Laugenour and Meikle.

B. FIELD EXPLORATION

On December 30, 2019, we drilled and sampled a total of six borings for the proposed housing development at the approximate locations indicated in Figure 2. The borings were drilled to a maximum depth of 21½ feet below existing site grades by using a CME-55 track-mounted drill rig equipped with 4-inch-diameter and 6-inch-diameter, solid-flight helical augers provided by Taber Drilling of West Sacramento, California. At various intervals, relatively undisturbed soil samples were recovered with a 2½-inch O.D., 2-inch I.D., modified California sampler driven by an automatic 140-pound hammer freely falling 30 inches. The number of blows of the hammer required to drive the 18-inch-long sampler each 6-inch-interval was recorded. The sum of the blows required to drive the sampler the lower 12-inch-interval, or portion thereof, is designated the penetration resistance or "blow count" for that particular drive.

The samples were retained in 2-inch-diameter by 6-inch-long, thin-walled, brass tubes contained within the modified California sampler. Immediately after recovery, the soils in the tubes were visually classified by the field engineer and the ends of the tubes were sealed to preserve the natural moisture contents. All samples were taken to our laboratory for additional soil classification and selection of samples for testing.

The Boring Logs, Figures 3 through 8, contain descriptions of the soils encountered at each boring location. A Boring Legend explaining the Unified Soil Classification System and the symbols used on the logs is contained on Figure 9.

C. LABORATORY TESTING

Selected undisturbed samples of the soils were tested to determine dry unit weight (ASTM D2937), natural moisture content (ASTM D2216), and unconfined compressive strength (ASTM D2166). The results of these tests are included on the boring logs at the depth each sample was obtained.

Two representative samples of near-surface soil were subjected to an Atterberg Limit test (ASTM D4318). The results of this test are presented in Figure A1.

Two representative samples of near-surface soil were tested to evaluate the expansion index of the soils in accordance with ASTM D4829. The test results are presented in Figures A2 and A3.

Two representative samples of near-surface soil was subjected to Resistance “R” value testing (California Test 301). The test results were used for pavement design purposes and are presented in Figure A4.

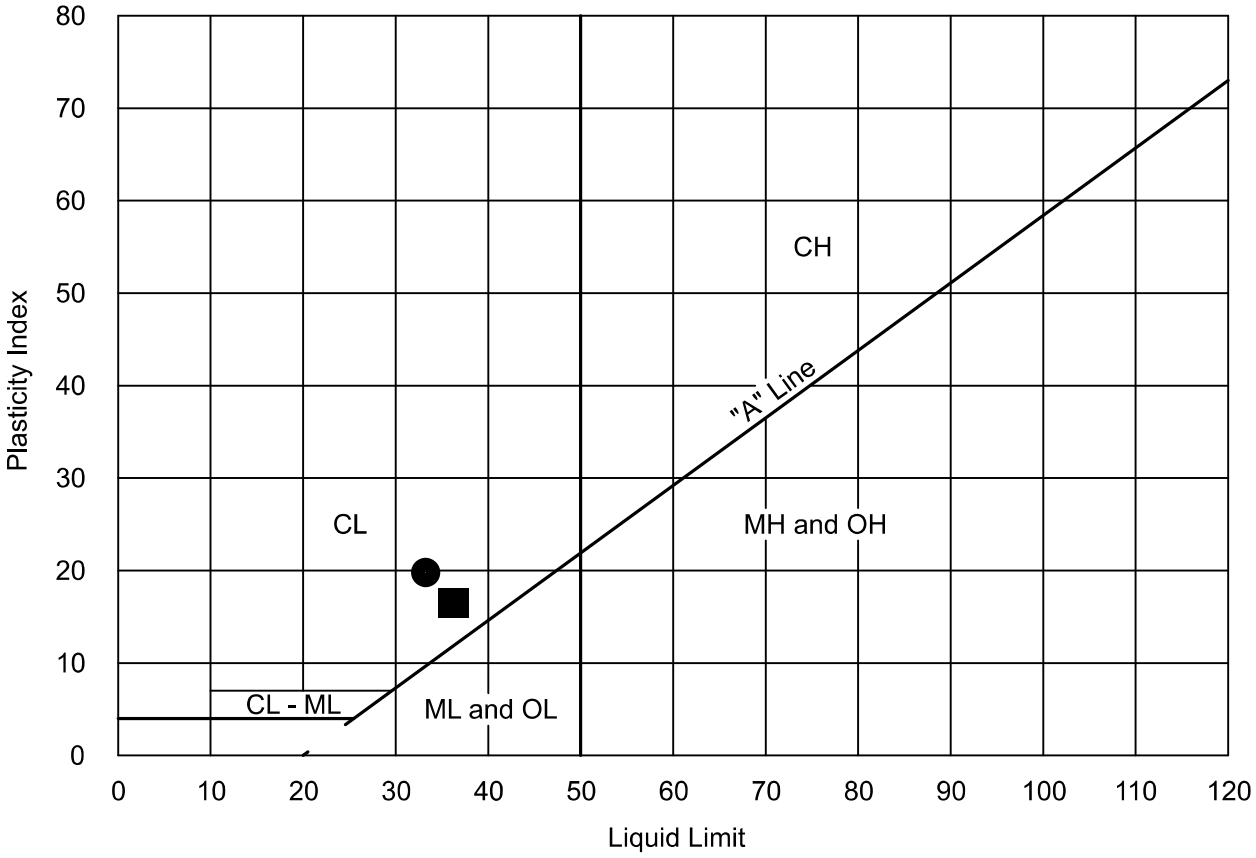
Two samples of the near-surface soil were submitted to Sunland Analytical of Rancho Cordova, California, to determine the soil pH and minimum resistivity (California Test 643), Sulfate concentration (California Test 417, ASTM D516M) and Chloride concentration (California Test 422). The results of these tests are presented in Figures A5 through A8.

One bulk sample of near-surface soil was subjected to laboratory compaction testing (ASTM D1557). The test results are presented in Figure A9.

One sieve analysis/grain size test was performed on near-surface soil further evaluate soil type (ASTM D422). One hydrometer test was also performed to determine the percentage of the near-surface clay soils passing the No. 200 sieve (ASTM D1140). The results of the sieve analysis, grain size and hydrometer tests are presented in Figure A10.

ATTERBERG LIMITS

ASTM D4318



KEY SYMBOL	LOCATION	SAMPLE DEPTH	NATURAL WATER CONTENT (%)	ATTERBERG LIMITS		PASSING No. 200 SIEVE (%)	UNIFIED SOIL CLASSIFI-CATION SYMBOL
				LIQUID LIMIT (%)	PLASTICITY INDEX (%)		
■	D1	0'-5'	---	36	17	---	CL
●	D5	0'-5'	---	43	20	---	CL

Wallace Kuhl & ASSOCIATES

ATTERBERG LIMITS

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A1
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO. 12185.02P

EXPANSION INDEX TEST RESULTS

ASTM D4829

MATERIAL DESCRIPTION: Brown clay

LOCATION: D1 (0' - 5')

Sample Depth	Pre-Test Moisture (%)	Post-Test Moisture (%)	Dry Density (pcf)	Expansion Index
0'-5'	19.0	46.5	85.5	**47**

CLASSIFICATION OF EXPANSIVE SOIL *

EXPANSION INDEX	POTENTIAL EXPANSION
0 - 20	Very Low
21 - 50	**Low**
51 -90	Medium
91 - 130	High
Above 130	Very High

* From ASTM D4829, Table 1

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EXPANSION INDEX TEST RESULTS

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A2
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20
WKA NO.	12185.02P

EXPANSION INDEX TEST RESULTS

ASTM D4829

MATERIAL DESCRIPTION: Dark grey-brown clay

LOCATION: D5 (0' - 5')

Sample Depth	Pre-Test Moisture (%)	Post-Test Moisture (%)	Dry Density (pcf)	Expansion Index
0'-5'	19.0	46.2	85.6	**43**

CLASSIFICATION OF EXPANSIVE SOIL *

EXPANSION INDEX	POTENTIAL EXPANSION
0 - 20	Very Low
21 - 50	**Low**
51 -90	Medium
91 - 130	High
Above 130	Very High

* From ASTM D4829, Table 1

WallaceKuhl & ASSOCIATES

EXPANSION INDEX TEST RESULTS

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A3
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20
WKA NO.	12185.02P

RESISTANCE VALUE TEST RESULTS

(California Test 301)

MATERIAL DESCRIPTION: Brown, fine, sandy clay

LOCATION: D3 (0' - 5')

Specimen No.	Dry Unit Weight (pcf)	Moisture @ Compaction (%)	Exudation Pressure (psi)	Expansion (dial, inches x 1000)	Expansion (psf)	R Value
IH	114	16.0	227	17	74	8
16H	118	15.0	554	79	342	20
B	117	15.4	387	41	178	15

* R-Value at 300 psi Exudation pressure: **11**

MATERIAL DESCRIPTION: Dark brown, sandy clay

LOCATION: D6 (0' - 5')

Specimen No.	Dry Unit Weight (pcf)	Moisture @ Compaction (%)	Exudation Pressure (psi)	Expansion (dial, inches x 1000)	Expansion (psf)	R Value
B1	124	13.2	684	59	255	26
B2	118	14.3	518	9	39	15
B3	115	15.6	237	14	61	8

* R-Value at 300 psi Exudation Pressure: **9**

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RESISTANCE VALUE TEST RESULTS

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A4
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO. 12185.02P

Sunland Analytical
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Date Reported 01/08/2020
Date Submitted 01/03/2020

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West Sacramento, CA 95691

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : 12185.02P Site ID : D4@0-5.
Thank you for your business.

* For future reference to this analysis please use SUN # 81197-169577.

EVALUATION FOR SOIL CORROSION

Soil pH	7.44	
Minimum Resistivity	1.80 ohm-cm (x1000)	
Chloride	5.8 ppm	00.00058 %
Sulfate	23.4 ppm	00.00234 %

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422m

WallaceKuhl & ASSOCIATES

CORROSION TEST RESULTS

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A5
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO. 12185.02P

Sunland Analytical
11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

Date Reported 01/08/2020
Date Submitted 01/03/2020

To: Kylie Lim
Wallace-Kuhl & Assoc.
3050 Industrial Blvd
West Sacramento, CA 95691

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : 12185.02P Site ID : D4@0-5.
Thank you for your business.

* For future reference to this analysis please use SUN # 81197-169578.

Extractable Sulfate in Water

Type of TEST	Result	Units
Sulfate-SO4	24.4	mg/kg

METHODS
ASTM D-516m from sat.paste extract-reported based on dry wt.

WallaceKuhl & ASSOCIATES

CORROSION TEST RESULTS

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A6
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO. 12185.02P

Sunland Analytical
11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

Date Reported 01/08/2020
Date Submitted 01/03/2020

To: Kylie Lim
Wallace-Kuhl & Assoc.
3050 Industrial Blvd
West Sacramento, CA 95691

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : 12185.02P Site ID : D6@0-5.
Thank you for your business.

* For future reference to this analysis please use SUN # 81197-169579.

EVALUATION FOR SOIL CORROSION

Soil pH	7.44	
Minimum Resistivity	1.63 ohm-cm (x1000)	
Chloride	3.1 ppm	00.00031 %
Sulfate	13.3 ppm	00.00133 %

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422m

WallaceKuhl & ASSOCIATES

CORROSION TEST RESULTS

EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A7
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO. 12185.02P

Sunland Analytical
11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

Date Reported 01/08/2020
Date Submitted 01/03/2020

To: Kylie Lim
Wallace-Kuhl & Assoc.
3050 Industrial Blvd
West Sacramento, CA 95691

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : 12185.02P Site ID : D6@0-5.
Thank you for your business.

* For future reference to this analysis please use SUN # 81197-169580.

Extractable Sulfate in Water

Type of TEST	Result	Units
Sulfate-SO4	14.5	mg/kg

METHODS
ASTM D-516m from sat.paste extract-reported based on dry wt.

WallaceKuhl & ASSOCIATES

CORROSION TEST RESULTS

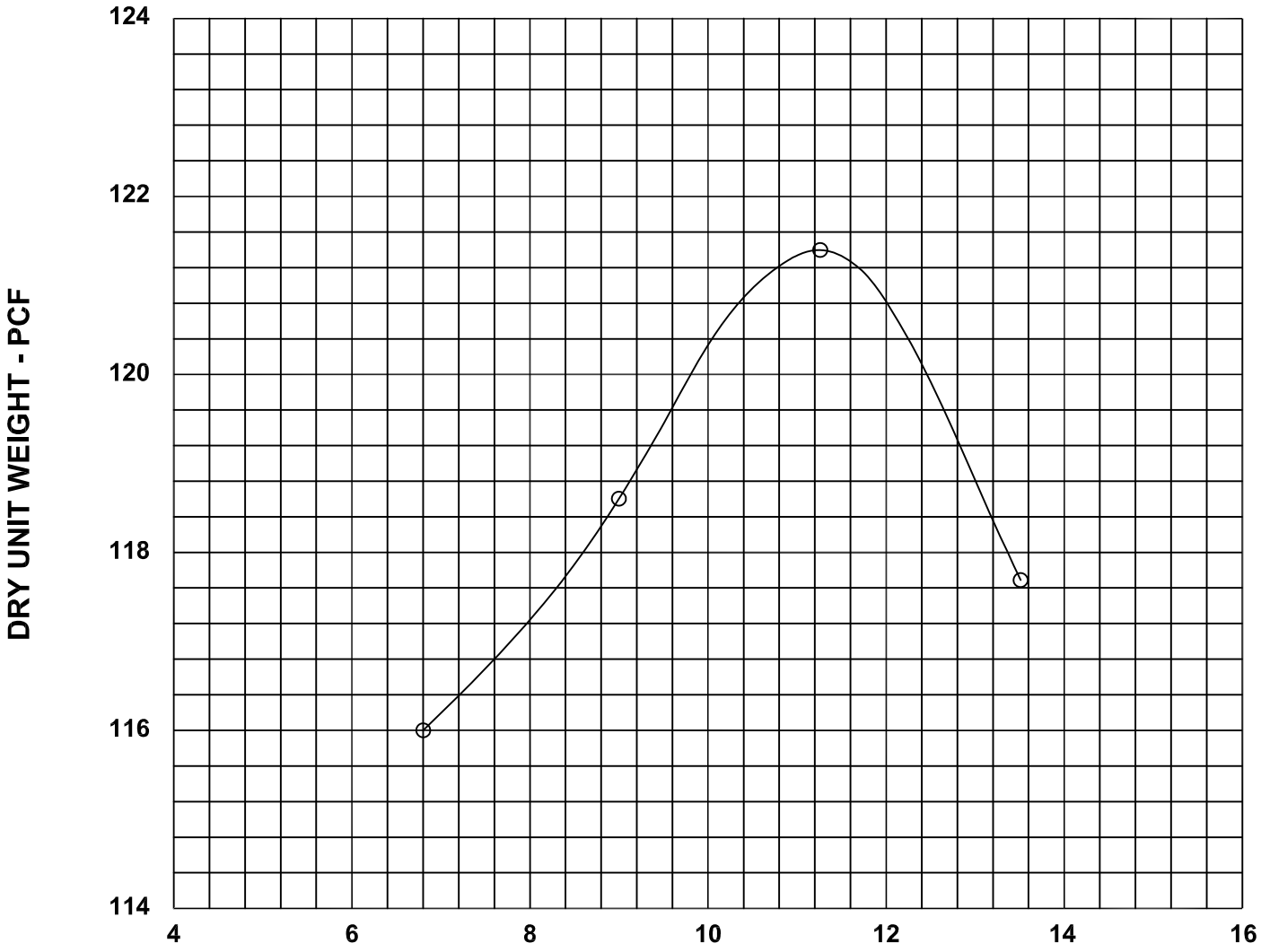
EAST BEAMER STREET HOUSING PROJECT

Woodland, California

FIGURE	A8
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO. 12185.02P

MOISTURE-DENSITY RELATION



Material: Brown clay

Location: Composite

Test Method: ASTM D1557 "A"

Maximum Dry Unit Weight - PCF: 121.5

Optimum Moisture - %: 11.2

WallaceKuhl & ASSOCIATES

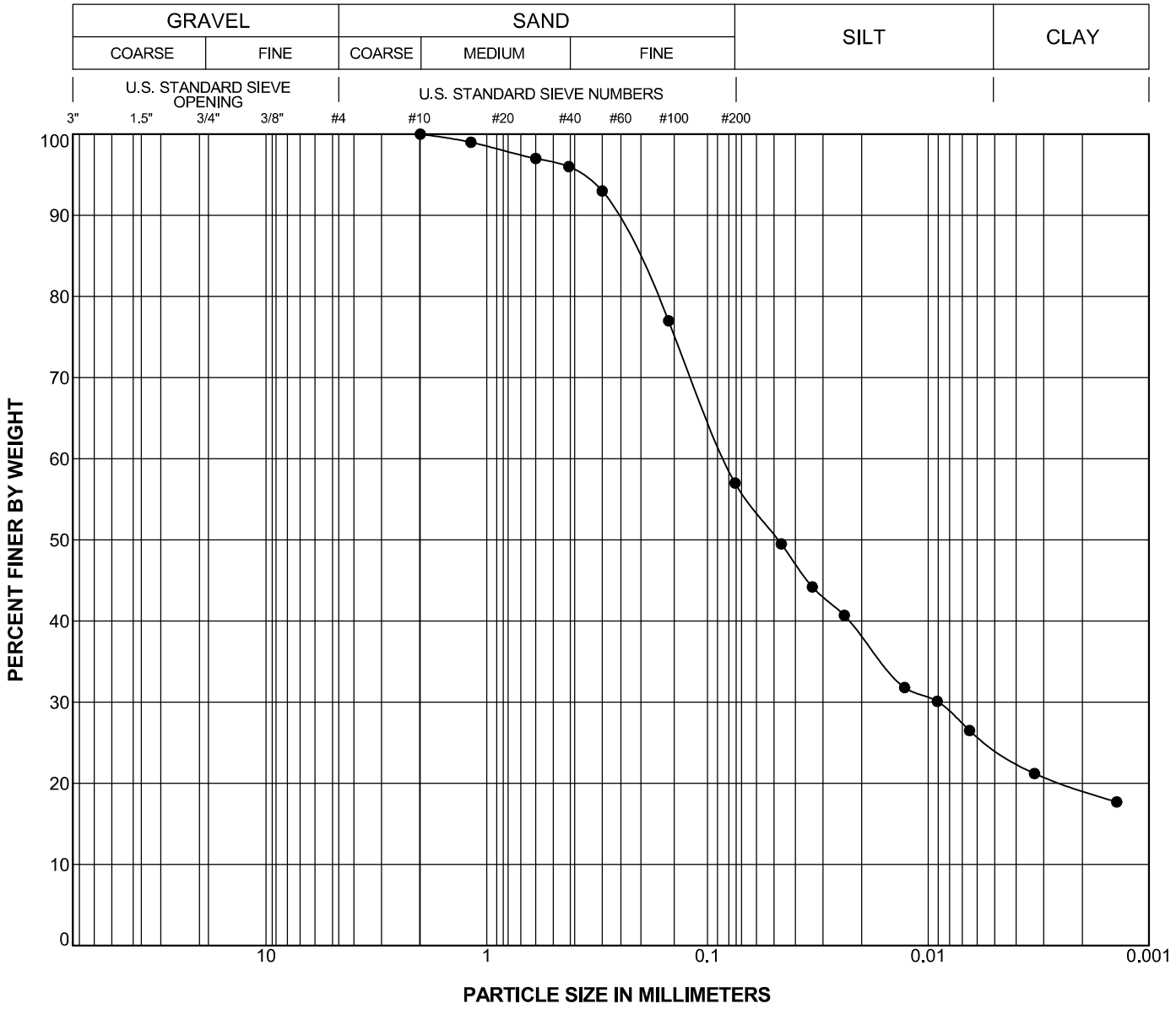
COMPACTION CURVE

EAST BEAMER HOUSING PROJECT

West Sacramento, California

FIGURE	A9
DRAWN BY	JBV
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/20

WKA NO. 12185.02P



Boring Number	Sample Number	USCS	Depth (feet)	Symbol	LL	PI	Classification
D4	D4-1I	SC	3-3.5'	●			Brown clayey sand

PARTICLE SIZE DISTRIBUTION

Project: East Beamer Street Housing Project
WKA No. 12185.02P

FIGURE A10

Wallace Kuhl & ASSOCIATES

GRAIN SIZE 12185.02P - EAST BEAMER STREET HOUSING PROJECT.GPJ WKA.GDT 1/27/20 9:23 AM

APPENDIX B
Earthwork Specifications

APPENDIX B

EARTHWORK SPECIFICATIONS

EAST BEAMER STREET HOUSING PROJECT

East Beamer Street and County Road 102

Woodland, California

WKA No. 12185.02P

GEOTECHNICAL REPORT

A Geotechnical Engineering Report (WKA No. 12185.01P, dated January 29, 2019), has been prepared for this project by Wallace - Kuhl & Associates of West Sacramento, California; telephone (916) 372-1434; facsimile (916) 372-2565.

SEASONAL LIMITS

Fill materials shall not be placed, spread or rolled during unfavorable weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until field tests indicate that the moisture content and density of the fill are satisfactory.

MATERIALS

On-site soils are considered suitable for use in engineered fill construction, do not contain rubble, rubbish, or concentrations of organics. On-site materials exceeding six inches (6") shall be removed from any fill supporting the buildings or pavements. Imported fill materials, if required, shall be similar to but less expansive than native soils; shall not contain particles greater than three inches (3") in maximum dimension. Imported soils shall be approved by our office prior to being transported to the site.

CLEARING, GRUBBING AND PREPARING BUILDING AND PAVEMENT AREAS

All existing improvements designated for removal shall be demolished and construction areas shall be cleared of miscellaneous surface trash, rubble, deleterious debris, fencing, etc. associated with previous site development. Demolition debris shall be removed and disposed of so as to leave the areas that have been disturbed with a neat and finished appearance, free

from unsightly debris. Adequate removal of debris and roots may require laborers and handpicking to clear the subgrade soils to the satisfaction of our on-site representative, prior to further site preparation. Depressions resulting from the removal of the above items shall be cleaned out to firm, undisturbed soil and backfilled with suitable materials in accordance with these specifications.

Any undocumented fill soils, including disced and disturbed soils, must be completely removed to expose firm undisturbed soils, as determined by the Geotechnical Engineer's representative. Undocumented fill soils may be used as engineered fill material, provided they do not contain significant organics, clays, rubble, rubbish, or other unsuitable materials.

Remaining surface organics shall be removed by stripping. Strippings shall not be used in general fill construction or those fills used to support sound walls, but may be used in landscape areas, provided they are kept at least five feet (5') from the building pads, moisture conditioned and compacted. Discing of organics into the surface soils may be a suitable alternative to stripping, depending upon the quantity and condition of the surface vegetation at the time of grading. Discing will be allowed only with our prior approval. Discing operations shall be observed by our representative and must be continuous until organics are adequately mixed with the soil to provide a compactable mixture. Pockets or concentrations of organics will not be allowed.

Following site clearing activities, the disturbed soils and construction areas shall be scarified to a depth of at least twelve inches (12"), thoroughly moisture-conditioned to at least two percent (2%) above the optimum moisture content for clay soils, and uniformly compacted to not less than 90 percent (90%) of the maximum dry density as determined by ASTM D1557. Subgrade preparation operations shall extend at least five feet (5') beyond the building pads, including adjacent flatwork, and two feet (2') beyond pavement areas, where practical.

Ponds and low-lying areas designated to be backfilled shall be cleaned of organics (if present) and excavated to a firm, stable subgrade, as verified by our representative. Recommendations for stabilizing the bottom of the excavation can be provided at the time of construction.

Areas designated to receive fill, at-grade areas, or those achieved by excavation, shall be plowed or scarified, to a depth of at least twelve inches (12"), moisture conditioned to at least the optimum moisture content for granular soils, at least two percent (2%) above the optimum moisture content for clay soils, and uniformly compacted to not less than ninety percent (90%) of the maximum dry density as determined by ASTM D1557.

Compaction operations shall be performed in the presence of the Geotechnical Engineer who will evaluate the performance of the materials under compactive load. Unstable soil deposits, as determined by the Geotechnical Engineer, shall be excavated to expose a firm base, and grades restored with engineered fill in accordance with these specifications.

PLACING, SPREADING AND COMPACTING FILL MATERIAL

The selected fill material shall be placed in layers which, when compacted, shall not exceed six inches (6") in thickness. Each layer shall be spread evenly and shall be thoroughly mixed during the spreading to promote uniformity of material in each layer.

When the moisture content of the fill material is too high to permit the specified compaction to be attained, the fill material shall be aerated by blading or other methods until the moisture content is satisfactory.

After each layer has been placed, mixed, moisture conditioned and spread evenly, it shall be thoroughly compacted to at least ninety percent (90%) of the maximum dry density as determined by ASTM D1557. Compaction shall be undertaken with equipment capable of achieving the specified density and shall be accomplished while the fill material is at the required moisture content. Each layer shall be compacted over its entire area until the desired density has been obtained.

FINAL SUBGRADE PREPARATION

The upper twelve inches (12") of all final building pad subgrades shall be uniformly and firmly compacted to ninety percent (90%) of the ASTM D1557 maximum dry density at a moisture

content of at least two percent (2%) above the optimum moisture content, maintained in that condition and protected from disturbance.

The upper six inches (6") of final pavement subgrades shall be uniformly moisture conditioned to at least the optimum moisture content and uniformly compacted to at least ninety-five percent (95%) of the maximum dry density, regardless of whether final grade is completed by excavation, filling, or left at-grade.

FIELD DENSITY TESTS

Field density tests shall be made by the Geotechnical Engineer or their representative after compaction of each layer of fill. Where compaction equipment has disturbed the surface to a depth of several inches, density tests shall be taken in the compacted material below the disturbed surface. Additional layers of the fill shall not be spread until the field density tests indicate that the specified density has been obtained.

TESTING

Observation and testing by the Geotechnical Engineer or their representative shall be provided during all filling and compacting operations. The grading contractor shall give at least twenty-four (24) hours notice prior to beginning such operations to allow proper scheduling of the work.

The Geotechnical Engineer or their representative shall field-check the moisture content of all subgrades that are to support concrete slab-on-grade floors, not more than forty-eight (48) hours prior to placement of concrete.

/

Appendix E

City of Woodland
Climate Action Plan Consistency Checklist

Climate Action Plan Consistency Checklist Introduction

The City of Woodland prioritizes sustainability and encourages the use of sustainable development practices. The 2035 General Plan advocates responsible growth while seeking to conserve energy, water, and other resources; reduce greenhouse gas (GHG) emissions; promote infill, green and net-zero energy development; and build community resiliency to the effects of climate change. The City's 2035 Climate Action Plan (CAP), adopted with the General Plan in 2017, provides a set of community-generated strategies to guide the City, its residents, and local businesses in reducing GHG emissions consistent with State goals for addressing California's contributions to climate change. Implementation of the CAP requires that new development projects incorporate more sustainable design standards and implement applicable GHG reduction measures consistent with the CAP. This CAP Consistency Checklist (Checklist) was developed to help plan and design projects consistent with the CAP and to assist City staff in implementing CAP strategies,

This Checklist allows proposed development projects that are subject to the California Environmental Quality Act (CEQA) to demonstrate consistency with Woodland's CAP. CEQA Guidelines require the analysis of GHG emissions as well as any potential impacts that the proposed project might have on the environment. Projects that demonstrate consistency with the CAP may be eligible to streamline the review process. The CAP is a verified GHG emissions reduction plan in accordance with CEQA Guidelines Section 15183.5. Projects that do not display consistency may, at the City's discretion, prepare an independent comprehensive project-specific GHG emissions analysis consistent with CEQA requirements. This Checklist identifies measures that are required in order to support CEQA streamlining.

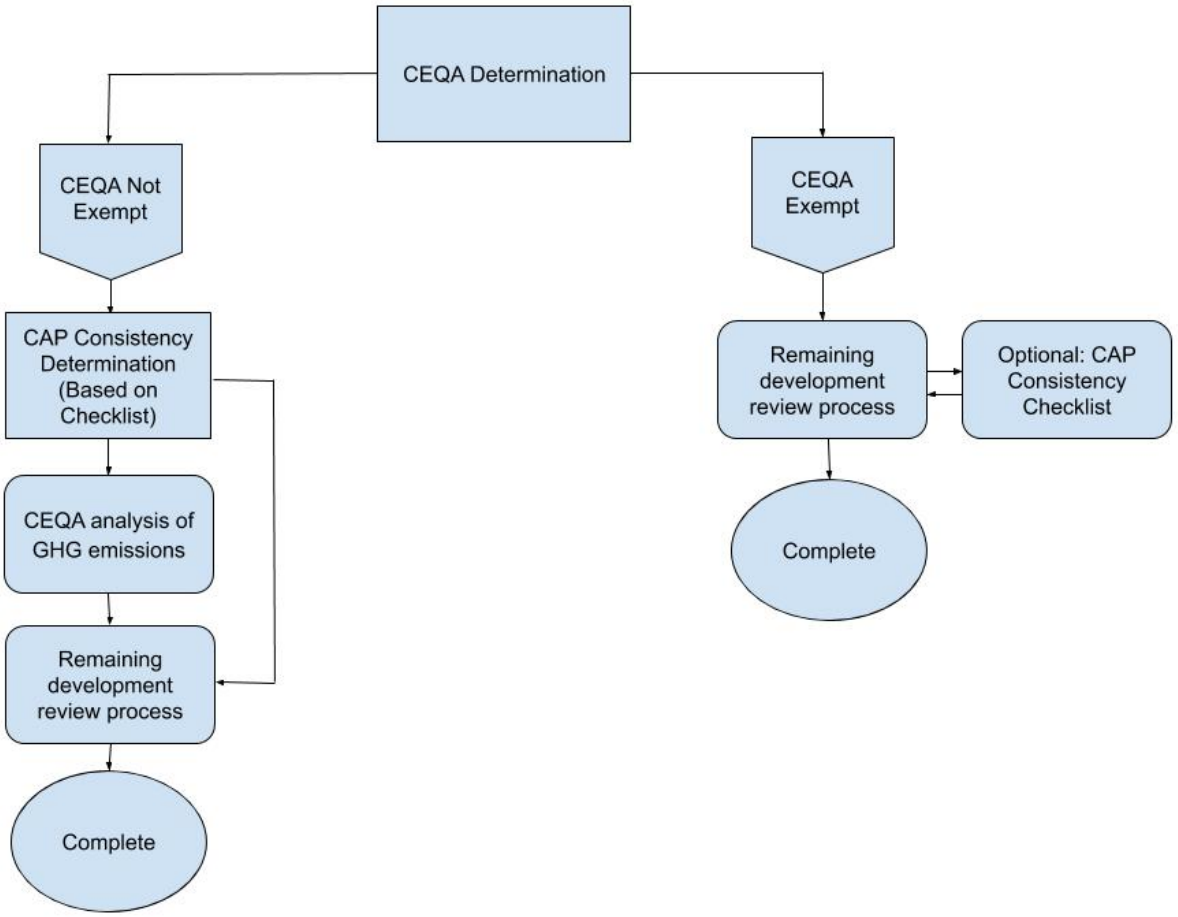
More broadly, the Checklist also identifies GHG reduction strategies that may be incorporated into proposed development projects. By encouraging development strategies and designs that conserve resources and reduce project-related GHG emissions, the Checklist supports Woodland's sustainability efforts and policies that encourage the advancement of sustainable growth, including implementation of the CAP.

There are five steps to this application:

1) CAP Consistency Checklist Application Form
2) Land Use Element Consistency
3) CAP Strategy Consistency
4) Additional Questions
5) Certification

Applicability

If a proposed development is exempt from CEQA review, then this document may act as a recommendations list for sustainable measures and designs that may be incorporated into the proposed development project. The diagram below displays the context for the CAP Consistency Checklist within the planning review process framework.



Step 1: CAP Consistency Checklist Application Form

Project Information

Project Name: East Beamer Way Neighborhood Campus Project

Project Address: 1901 E. Beamer St. Woodland CA 95776

Project Type: Residential and institutional development

Project Size: 8.5 acres

Proposed Land Uses: Residential and institutional facilities

Service Population (Residents + Employees): Approximately 250

Brief Project Description: Permanent supportive residences, a homeless shelter, a substance abuse treatment facility, and a community center

Applicant Information

Applicant Name: Community Development Department

Company: City of Woodland

Contact Phone: 530-661-5910

Contact Email: Stephen.coyle@cityofwoodland.org

Was a consultant retained to complete this checklist? ☐ Yes ☒ No

If yes, complete the following:

Consultant Name:

Company:

Contact Phone:

Contact Email:

Step 2: Land Use Consistency

This section allows the City to determine a project's consistency with the land use assumptions used in the development of the CAP. The growth projections outlined in the 2035 General Plan Land Use Element were used in Woodland's CAP to estimate community-wide GHG emissions over time. Therefore, new development projects must be consistent with the Land Use Element to be consistent with Woodland's CAP.

Land Use Consistency	Yes	No
Is the proposed project consistent with the existing General Plan land use and zoning designations?		No
If "**Yes**", please explain how the project is consistent with the existing General Plan land use and zoning designations in the space provided below and then proceed to Step 3 of the Checklist.		
If "**No**", the proposed project must prepare a comprehensive project-specific analysis of GHG emissions and incorporate the measures in this Checklist to the extent feasible. The County of Yolo would need to approve the proposed Tentative Parcel Map. Yolo County would also be responsible for approving a General Plan Amendment to redesignate the site from Public and Quasi-Public (PQ) to Commercial General (CG), as well as a Rezone from Public/Quasi-Public (PQP) to General Commercial (C-G). The site's current PQ land use designation and PQP zoning are intended for land uses including public offices, civic uses, schools, museums, fraternal organizations, and more. Alternatively, the CG land use and C-G zoning is intended to include general retail, personal services, professional offices, restaurants, gas and service stations, hotels and motels, and other similar uses. As such, the proposed CG land use designation and C-G zoning would better accommodate the proposed land uses.		

Step 3: CAP Strategy Consistency

Energy

Incorporating energy efficiency and/or renewable energy into a project can have long-term benefits for reducing utility bills and GHG emissions while adding value to the property. The City encourages all projects to incorporate energy efficiency and renewable energy into project design and construction.

Projects subject to CEQA that are using the Checklist for CEQA streamlining eligibility must incorporate the GHG reduction strategies marked as "**(Required)**." If "no" is marked for a required measure, the project will not be eligible to use the checklist for CEQA streamlining.

GHG Reduction Strategy	Sustainable Development Measures	Yes	No
E-1: Lighting Efficiency Upgrades (**Required**)	**Installation of high-efficiency lighting:** Does the project include LED lights, solar tubes, sky lights, and take consideration of room orientation to maximize the use of natural lighting?	LED Lights	
E-3: Comprehensive Building Efficiency	**Energy efficiency:** Does the project incorporate sustainable construction and development practices in the CalGreen Code such as cool roofs, vegetation, permeable or other special pavements, shading devices, operable windows placed for cross ventilation, or other passive temperature control factors to reduce building energy use and heat island effects on and around buildings?	Light roof color, shading and ground vegetation, large, operable windows	
E-4: Improved Building Temperature Controls (**Required**)	**Natural climate control features:** Are natural temperature control factors such as cross ventilation, wind protection, and shade considered in site and building design for the project?	Cross ventilation and shade	
E-4: Improved Building Temperature Controls	**Innovative site designs:** Does the project include innovative site designs and building orientations for new construction that incorporate passive and active solar designs and natural cooling techniques?	Yes, most dwelling oriented east-west to minimize heat gain on long sides	

	Efficient heating and cooling: Does the project include buildings with mechanical HVAC systems to decrease energy use and increase reliance on natural heating, cooling, and ventilation?	High-performance heat pumps	
E-6: Renewable energy generation and procurement	**Renewable energy (residential):** Does the project include solar installations of 3 kW or larger to accommodate electric vehicle charging and achieve net zero carbon footprint without future need to increase inverter?	Working with PV installers to help provide roof-mounted PVs	
	Renewable energy use (residential): Will homes be constructed for the subsequent installation of solar photovoltaic and/or solar water heaters?	Cabled for inverter and PVs	

Please explain how the proposed project incorporates the required measures and any additional sustainable development measures consistent with the CAP.

1. The project is all-electric (no natural gas) with electric heat pumps that provide efficient heating and cooling, and electric hot water heaters that can be powered from roof-top photovoltaic (PV) panels.
2. All buildings will be cabled for roof-mounted PV panels. The owner/operators, Friends of the Mission, continue to seek PV providers to provide and install roof-mounted units. The manufactured dwellings will be ordered with PVs, as conditioned by funders.
3. Shade trees will be provided and planted by the Woodland Tree Foundation, City of Woodland, and others.

Transportation and Land Use

Practices and infrastructure that promote ease and convenience of pedestrian, bicycle, and transit travel for daily trips that situate residents in proximity to workplaces, goods and services, and recreational opportunities are essential to reducing the use of passenger vehicles locally and regionally. The City encourages all projects to incorporate sustainable development measures into project design and construction to support reducing single-occupancy motor vehicle use and increasing the use of efficient and alternative modes of transportation.

Projects subject to CEQA that are using the Checklist for CEQA streamlining eligibility must incorporate the GHG reduction strategies marked as "**(Required)**." If "no" is marked for a required measure, the project will not be eligible to use the checklist for CEQA streamlining.

GHG Reduction Strategy	Sustainable Development Measures	Yes	No
T/LU-2: Infill Development, Redevelopment, and Repurposing	**Density (residential):** Does the project incorporate the highest level of residential density allowed in the zoning code?	Yes, over 20 DU/A	
	Infill development: Does the project develop on an underutilized or unused infill site?	Yes, considered redevelopment of an underutilized site	
	Use of existing structures: Does the project reuse an existing structure(s)?		No
T/LU-3: Smart Growth in New Development	**Infill and proximity of housing:** Does the project include infill housing and housing built within walking distance to jobs, transportation, and amenities?	Yes	
	Transit services: Is the provision of transit services considered in the project.	Yes	
	Proximity of transit services: Will the project be served by public transit within ¼ mile of the site?	½ mile to bus stop; service at the site by private service	
	Mixed use development (residential): Does the project incorporate mixed uses within the development?	Yes	

	Proximity to retail (residential): Does the project's plan support convenient walking and biking distances for daily shopping trips?		No
T/LU-3: Smart Growth in New Development (**Required**)	**Alternative transportation (commercial):** Does the project include bicycle parking, electric vehicle charging stations, and/or other incentives for non-fossil-fuel transportation?	Yes, bike parking	
T/LU-5: Increase Mass Transit Use, Walking, and Bicycling (**Required**)	**Bicycle-friendly design (multi-family):** Does the project provide secure bicycle storage options and/or bicycle-share programs?	Yes, bike parking and storage	
T/LU-7: Increased Use of Alternative-Fuel Vehicles	**Electric vehicle (EV) chargers (residential):** Does the project include EV charging infrastructure?		No

Please explain how the proposed project incorporates the required measures and any additional sustainable development measures consistent with the CAP.

1. Project will reclaim a former wastewater treatment facility site
2. The housing comprises 20 units per acre. However, when combined with the shelter and treatment center, the density approaches 75 residents per acre.
3. The compact plan allows residents pedestrian access to on-site support services and food services.
4. Most residents do not own motor vehicles so they rely on transit, car sharing, bike and walking to destination.
5. The resident mobility needs will consist of public and private transit, ride share services and volunteer rides.

If the proposed project incorporates sustainable development measures beyond what is included in the CAP, please explain.

1. Tree shading and canopies will help reduce heat island effects.
2. The dwellings will consist of duplexes with one common wall to save energy.
3. The two institutional buildings and the dwellings will be configured for roof-mounted photo-voltaic panels.
4. The two institutional buildings and the dwellings will utilize operable windows for internal ventilation.
5. The project is all electric to avoid gas appliances and maximize clean energy from Valley Clean Energy.

Urban Forest & Open Space

Trees help reduce GHG emissions in several ways: reducing the heat island effect, reducing indoor building temperatures, and carbon sequestration. Planting trees strategically can have long-term benefits for beautifying streets, reducing utility bills and GHG emissions, and increasing comfort inside and outside of buildings. The City encourages all projects to incorporate appropriate placement and planting of trees into project design and construction.

Projects subject to CEQA that are using the Checklist for CEQA streamlining eligibility must incorporate the GHG reduction strategies marked as "**(Required)**." If "no" is marked for a required measure, the project will not be eligible to use the checklist for CEQA streamlining.

GHG Reduction Strategy	Sustainable Development Measures	Yes	No
UF-1: Urban Forest Management Plan	**Urban Forest Management Plan:** Does the project include planting mediums, planting techniques, and soil amendments that can provide multiple benefits as identified in Woodland's Urban Forest Master Plan?	Yes, through Tree Foundation and others	
UF-2: Increased Tree Planting (**Required**)	**Shade tree cover (residential):** Does the project include two shade trees per home on east, west, or south face of the home with trees located to prevent interference with solar PV production?	Yes	
UF-2: Increased Tree Planting	**Shade tree cover:** Does this project include the planting of larger trees to maximize the GHG reduction benefit?	Yes, 15 gallon minimum	
UF-2: Increased Tree Planting	**Shade over street cover:** Does the project include street trees to shade asphalt and parked cars?	Yes, along all streets	
Please explain how the proposed project incorporates the required measures and any additional sustainable development measures consistent with the CAP. The "flood mitigation conveyance" basin to the east of the site will be developed into a green flood detention and habitat area with drought-resistant plants and other means of maintaining adequate plant coverage and water availability in the wet season.			

If the proposed project incorporates sustainable development measures beyond what is included in the CAP, please explain.

N/A

Water & Solid Waste

Incorporating water conservation and waste reduction measures into project design and construction supports long-term reductions in GHG emissions. The City encourages all projects to incorporate water conservation and waste reduction measures into project design and construction.

GHG Reduction Strategy	Sustainable Development Measures	Yes	No
W/W-1: Increased Water Conservation	**Water conservation:** Does the project exceed Title 24 water conservation building requirements?		No
	Drought-tolerant landscaping: Does the project include drought-tolerant native landscaping features in the landscape design?	Yes	
W/W-2: Solid Waste Reduction and Waste Processing Improvements	**Construction Recycling:** Will steps be taken to ensure that the project meets or exceeds the minimum requirement for construction and demolition debris recycling in accordance with the City's ordinance?	Yes	
	Recycling: Does the project allow adequate space for future collection of recyclable materials?	Yes	
	Organics Recycling: Does the project allow adequate space for future collection of food waste for large-scale processing as compost or into biofuels?	Yes	

Please explain how the proposed project incorporates the sustainable development measures consistent with the CAP.

1. The project contains areas of collection of recyclable materials and composting.
2. The residents will receive instructions on recycling, reusing and reducing waste.

If the proposed project incorporates sustainable development measures beyond what is included in the CAP, please explain.

N/A

Step 4: Additional Questions

1. Please provide a statement indicating the manner in which the project will meet sustainability goals and polices contained in the City's General Plan and Climate Action Plan. Examples of measures that may be utilized include, renewable energy, cross ventilation, operable windows, efficient heating and cooling systems, window awnings, light roofs, electric vehicle charging infrastructure, secure bicycle parking, and other measures.

The East Beamer Way Neighborhood Campus Project will create a habitat for those in need of physical, mental, and emotional support through a new model that provides beds, housing, and "wrap-around" services for many of the residents, ranging from mental health counseling support to treatment for drug and alcohol dependencies.

As noted throughout this checklist, several sustainability measures will be utilized, including incorporation of operable windows, provision of renewable energy infrastructure, restriction of natural gas appliances, and others. In addition, the project provides necessary housing and services to in-need individuals in an effort to protect and improve the community.

Sustainability goals and polices are worthless if citizens cannot access the necessary housing and services. When sustainability measures like tree planting are added to a compact urban form – the entire project will sit on a 300-foot by 700-foot pad – the results will offer a way to protect and improve the poorest and in-need population in our community.

2. Urban development and increases in paved surfaces can increase the heat island effect resulting in an urban area that is significantly warmer than surrounding rural areas. Please provide a statement summarizing the measures that have been taken to reduce heat related concerns. Examples may include: covered and shaded walkways, extensive tree canopy, awnings or other shade structures, outdoor rooms or courtyards, indoor ceiling fans, and other measures.

The project provides shaded, tree-lined streets and walkways, a garden, and other green areas for gathering, while minimizing the use of paved surfaces and other low albedo areas. The entire surrounding area consists of grass-covered soils. Such measures would reduce the heat island effect that can occur from urban development.

Certification

I hereby certify that the statements furnished herein and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge.

Signature: _____ Date: 6-29-2020

Appendix F

Phase I Environmental Site Assessment

Phase I Environmental Site Assessment

EAST BEAMER HOUSING PROJECT PROPERTY

Woodland, California

WKA No. 12185.04P

May 29, 2020

Prepared for:

Mr. Stephen Coyle

City of Woodland

Community Development Department

Woodland, CA 95695

Wallace Kuhl & Associates

Corporate Office
3050 Industrial Boulevard
West Sacramento, CA 95691
916.372.1434 phone
916.372.2565 fax

Stockton Office
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Stockton, CA 95219
209.234.7722 phone
209.234.7727 fax

Phase I Environmental Site Assessment

EAST BEAMER HOUSING PROJECT PROPERTY

Woodland, California

WKA No. 12185.04P

May 29, 2020

Wallace-Kuhl & Associates (WKA), on behalf of The Community Development Department, prepared this Phase I Environmental Site Assessment for the East Beamer Housing Project Property located along East Beamer Street in Woodland, California. We declare that, to the best of our professional knowledge and belief, the report preparer and reviewer meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and 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 general conformance with the standards and practices set forth in 40 CFR Part 312 et seq. Resumes of the key staff who prepared this report are included in Appendix A.

WALLACE-KUHL & ASSOCIATES

PROFESSIONAL GEOLOGIST
KURT M. BALASEK
No. 6152
CERTIFIED HYDROGEOLOGIST
No. 296
STATE OF CALIFORNIA

Nancy M. Malaret
Project Environmental Scientist

Kurt Balasek, P.G., C.HG.
Senior Hydrogeologist

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C EDR® Radius Map Report with GeoCheck
D Preliminary Screen for Vapor Encroachment Conditions Matrix

*Supporting Documents Appendix contains: Custom Soil Resource Report, EDR® Reports: Sanborn Map Search, Historical Topographic Maps, Aerial Photographic Decade Package, and City Directory Report; and FEMA Flood Map.

EXECUTIVE SUMMARY

The purpose of this Phase I Environmental Site Assessment (ESA) was to assess the East Beamer Housing Project Property (herein referred to as Site) for evidence of Recognized Environmental Conditions (RECs) resulting from current and/or former Site activities. The Site is located along East Beamer Street in Woodland, California (Figures 1, 2, 3, and 4) and is comprised of approximately 16 acres of land that was historically developed with waste water treatment ponds. The Site is located on Yolo County Assessor's Parcel Number (APN): 027-360-010 (Figure 3). The following presents a list of observations and findings identified during the preparation of this report:

- The historical land use research dating back to the early 1900s revealed that the Site was grass-covered land from at least 1937 to at least 1954. It was developed with three ponds and extended to the north into three additional ponds associated with the City of Woodland wastewater treatment plant from at least 1968 to at least 1974. Two of the ponds and a portion of the third have been backfilled.
- According to information provided to WKA, approximately 1,300 cubic yards of petroleum hydrocarbon impacted soil were placed on the south-central portion of the Site in 1993. Additional soil from public works projects have been placed in the vicinity of the hydrocarbon impacted soils.
- WKA collected five soil samples from the soil stockpile located on the south-central portion of the Site. Laboratory analysis of the soil samples indicated that organochlorine pesticides, volatile organic compounds, and polychlorinated biphenyls were not present in soils above laboratory reporting limits. Concentrations of metals, except arsenic, and Total Petroleum Hydrocarbons as motor oil were reported but did not exceed environmental screening levels. Concentrations of arsenic detected in the soil samples exceed environmental screening levels; however, there were below expected background concentrations. TPH-as-motor oil was detected above the respective laboratory limit with results ranging from 1,200 mg/kg to 2,200 mg/kg; below the USEPA screening level of 230,000 mg/kg. Semi-volatile organic compounds were not detected in the soil samples; however, due to the sample having been diluted, the laboratory reporting limits were elevated above environmental screening levels. On the advice of the laboratory, WKA used the method reporting limit for comparison, however, 13 compounds had method reporting limits that still exceeded environmental screening

levels. WKA concluded that the soil stockpiles should either be relocated out of the project footprint or disposed at an appropriately licensed facility (See Section 4.2.10).

- WKA observed two areas with recently placed soil piles on the western portion of the Site. One area of soil was located in the southwestern pond and the second area was located between the two western ponds. Additional soil stockpiles or end dump piles may have been obscured by vegetation.
- WKA understands that all stockpiled soils will be removed from the property prior to redevelopment.
- Given the documentation reviewed concerning the agency listings for neighboring facilities, none of the facilities reviewed is likely to have a negative impact on the Site.
- Based on the completion of the vapor encroachment condition (VEC) screening matrix, WKA concludes a VEC can be ruled out because a VEC does not or is not likely to exist.

WKA has performed this ESA in conformance with the scope and limitations of ASTM Standard Practice E 1527-13 for the East Beamer Housing Project Property.

This assessment has revealed no RECs in connection with the Site except the following:

- On-site concerns were noted from the unknown origins of soils stockpiled on the western portion of the Site. End dump piles of soil were observed in the southwestern pond and in the area between two western ponds. Additional stockpiles or end dump piles may have been obscured by vegetation.
- On-site concerns were noted from the unknown origins of soils used to backfill former wastewater treatment ponds.

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) was to evaluate the East Beamer Housing Project Property (herein referred to as Site) for evidence of potential Recognized Environmental Conditions (RECs) resulting from current and/or former site activities as defined by the American Society of Testing and Materials (ASTM) Standard E 1527-13 (ASTM, 2013).

According to the ASTM, "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 under CERCLA [Comprehensive Environmental Response, Compensation and Liability Act] liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"): that is, the practice that constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B)."

This ESA has been performed in general conformance with the ASTM Standard E 1527-13 and the scope and limitations defined in Wallace-Kuhl & Associates (WKA) proposal, 3PR20080, dated May 15, 2020.

1.2 Scope of Services

WKA has completed this ESA for the Site shown on Figures 1 through 4. Mr. Stephen Coyle with Community Development Department authorized WKA to proceed with this assessment on May 15, 2020, through a signed WKA Environmental Site Assessment Consulting Agreement.

The scope of this assessment included the following:

- Conduct a site reconnaissance for visual evidence of surface contamination and potential sources of subsurface contamination;
- Conduct a visual inspection of the adjoining properties for evidence of RECs;
- Conduct interviews with the following, as available:
  - Key site manager,
  - Major occupants,

  - Past and present owners, operators,
  - Government and/or agency personnel, and,
  - Inquiries conducted at abandoned sites may include interviews with owners or occupants of neighboring or nearby properties;
- Conduct a records review, which included the following:
  - Physical setting documents to determine regional geology, general soil information, and local and regional groundwater conditions,
  - Historical information, including but not limited to, Sanborn maps, topographic maps, aerial photographs, ownership records, building department records, local street directories, zoning and land use records, and prior assessments, as available,
  - Environmental records, including federal, state, tribal, and county regulatory agency lists that will help identify RECs on the Site and the adjoining properties, and,
  - Based on the outcome of the database search, review of specific regulatory agency files for identified contaminated facilities in order to evaluate whether the listed facilities are hazardous materials threats to the Site;
- Conduct a preliminary screen for vapor encroachment conditions on the Site per ASTM E2600-15;
- Review of the completed *ASTM E 1527-13 User Questionnaire* (*Questionnaire*) regarding Recorded Environmental Liens, activity and use limitations (AULs), relationship of the purchase price to the fair market value of the Site, and any specialized knowledge of the Site;
- Review of environmental liens and Activity and Use Limitations (AULs) reports, as provided; and
- Prepare a final report of the results of the ESA.

1.3 Special Terms and Conditions

No special terms or conditions to the WKA Environmental Site Assessment Consulting Agreement or the WKA scope of services were requested or performed during the preparation of this report. The Community Development Department did not authorize WKA to conduct a search for environmental liens and AULs.

1.4 User Provided Information

WKA provided The Community Development Department a copy of the User Questionnaire and the Helpful Documents checklist. Mr. Steve Coyle, City of Woodland, completed and returned the documents to WKA. Discussion regarding his responses is provided in the following section. A copy of the completed questionnaire is included in Appendix B.

In summary, Mr. Coyle was not aware of any records of environmental liens or AULs currently recorded against the Site. Mr. Coyle stated he does not possess specialized knowledge or experience related to the Site. Mr. Coyle stated that he is not aware of any obvious indicators that point to the presence or likely presence of contamination at the Site.

Mr. Coyle was aware of existing "Helpful Documents" as defined in Section 10.8.1 of the ASTM Standard as noted on the "Helpful Documents Checklist" included in Appendix B. These reports are summarized in Section 4.2.10.

2.0 SITE DESCRIPTION

2.1 Site and Vicinity General Characteristics

The Site is located along East Beamer Street in Woodland, California (Figures 1 and 2). The Site is comprised of Yolo County Assessor's Parcel Number (APN) 027-360-010, totaling approximately 16 acres of land that was historically developed with waste water treatment ponds (Figure 3). The land surrounding the Site is vacant or used for agricultural purposes (Figure 4).

2.2 Site Reconnaissance

A visual site reconnaissance was conducted by WKA on May 19, 2020. Figure 5 provides color photographs of the Site taken during the site reconnaissance.

On the day of site reconnaissance, the Site was vacant land. Portions of the Site had been mowed recently; however, some areas were not mowed and vegetation was tall and dense. WKA observed an area with stockpiled soils on the south-central portion of the Site. WKA noted that asphalt and concrete debris appeared to be mixed into the soils. WKA observed depressed areas in the locations of former wastewater ponds. Recently placed soil piles were observed on the western portion of the Site.

2.2.1 Municipal Infrastructure and Utilities

Pacific Gas and Electric (PG&E) provides electricity and natural gas to the Site vicinity. The City of Woodland provides potable water and sanitary sewer service to the Site vicinity.

2.3 Adjoining Properties

The Site is bounded to the north by former City of Woodland wastewater detention basins. The Site is bounded to the east by County Road 102 followed by agricultural land. The Site is bounded to the south by East Beamer Street followed by agricultural land. A former wastewater detention basin is located to the west of the Site.

3.0 INTERVIEWS

Interviews with various persons familiar with the site vicinity, including representatives of public agencies, were conducted for the purpose of identifying past and present uses, which may have contributed to RECs on the Site. Results of those interviews are discussed in the following sections.

3.1 Owner or Key Site Manager

WKA provided Mr. Stephen Coyle, City of Woodland, with a questionnaire regarding the Site. Mr. Coyle completed the questionnaire and returned it to WKA. According to Mr. Coyle, the City of Woodland acquired the Site in the 1950s from Yolo County. The Site was developed with wastewater treatment ponds. The former wastewater treatment plant ceased operations in 1988. The Site has been used for cultivation of hay, storage of trench spoils from city projects, and depressed areas are used for stormwater detention. Mr. Coyle indicated that there is imported soil in ponds that have been filled in, in an east-west trending stockpile on the southern portion of the Site, and two areas on the western portion. Mr. Coyle is not aware of any aboveground or underground storage tanks that have been located at the Site. Mr. Coyle is not aware of any environmental liens that have been recorded for the Site.

3.2 Occupants (Multi-family or Major)

See Section 3.1.

3.3 Past Owners, Operators, and/or Occupants

No information regarding past owners, operators, and/or occupants was received by WKA during completion of this report.

3.4 State and/or Local Government Officials

The State Water Resources Control Board (SWRCB) publishes their records on their GeoTracker website. When records are unavailable on GeoTracker, WKA makes direct contact to request unpublished documents from the SWRCB. WKA reviewed information for facilities within the vicinity of the Site on the GeoTracker website and a summary is provided in Section 4.3.

3.5 Abandoned Properties

As referenced in 40 CFR Part 312, in the case of inquiries conducted at "abandoned properties," as defined in §312.23(d), "where there is evidence of potential unauthorized uses of the Site or evidence of uncontrolled access to the Site, the environmental professional's inquiry must include interviewing one or more (as necessary) owners or occupants of neighboring or nearby properties from which it appears possible to have observed uses of, or releases at, such abandoned properties…" No evidence of potential unauthorized uses, or evidence of uncontrolled access to the Site was observed. The Site is not considered an abandoned property and therefore, WKA did not interview owners or occupants of neighboring properties.

4.0 RECORDS REVIEW

The purpose of the records review is to obtain and review information concerning the current and historical use of the Site and adjoining properties that would help identify the presence of RECs in connection with the Site. The records review included review and discussion of the following, as available:

- Physical Setting Source(s);
- Historical Use Information; and,
- Environmental Record Sources.

4.1 Physical Setting Source(s)

The Site is depicted on the 1975 United States Geological Survey (USGS) 7.5 Minute topographic map of the *Grays Bend, California Quadrangle* as having a detention basin. The Site is located within Section 27, Township 11 North, Range 2 East, Mount Diablo Base and Meridian, at an elevation of approximately +40 feet relative to mean sea level (msl).

4.1.1 Regional and Local Geology

The Site is located in the Great Valley geomorphic province of California, a 500 mile, northwest-trending structural trough, generally constrained to the west by the Coast Ranges and to the east by the foothills of the Sierra Nevada Range (Norris and Webb, 1990). The Great Valley consists of two valleys lying end-to-end, with the Sacramento Valley to the north and the San Joaquin Valley to the south.

The Sacramento and San Joaquin Valleys have been filled to their present elevations with thick sequences of sediment derived from both marine and terrestrial sources. The sedimentary deposits range in thickness from relatively thin deposits along the eastern valley edge to more than 25,000 feet in the south central portion of the Great Valley (Norris and Webb, 1990). The sedimentary geologic formations of the Great Valley province vary in age from Jurassic to Quaternary, with the older deposits being primarily marine in origin. Younger sediments are continentally derived and were typically deposited in lacustrine, fluvial, and alluvial environments with their primary source being the Sierra Nevada Range.

The 1981 USGS *Geologic Map of the Sacramento Quadrangle, California*, shows the Site to be underlain by the Basin deposits consisting of unconsolidated silt and clay, originally deposited as overbank flood deposits or floodplains.

4.1.2 Radon Gas

Radon is a naturally occurring gas that is formed from the radioactive breakdown of radium in soil, rock, and water. Radon can move up through the ground and into living spaces through pathways and penetrations in a structure's foundation. Radon's potential presence in indoor air can only be assessed within existing buildings, as there are no currently available real time methods to assess Radon's presence over undeveloped properties.

The United States Environmental Protection Agency (EPA) has developed the EPA Map of Radon Zones to assist organizations in implementing radon-resistant building codes. The map assigns each county in the United States to one of three zones based on radon potential. The EPA uses a continuous exposure level of 4.0 picoCuries per liter (pCi/L) as an action level at which additional action is recommended.

The EPA Radon Zones are defined as:

- Zone 1 (Highest Potential) – Average indoor radon screening level greater than 4 pCi/L.
- Zone 2 (Moderate Potential) – Average indoor radon screening level between 2 and 4 pCi/L.
- Zone 3 (Lowest Potential) – Average indoor radon screening less than 2 pCi/L.

According to the EPA, the Site is located in Zone 3.

4.1.3 Soil Survey

The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) has created a web-based service for accessing soil information. According to the NRCS Web Soil Survey (WSS) the majority of the near-surface soils on the Site consist of Sycamore silty clay loam, drained, 0 percent slopes, MLRA 17; Pescadero silty clay, saline-alkali; and, Willows clay, 0 percent slopes, sodic, MLRA 17 (USDA, 2020). A copy of the Custom Soil Resource Report for the Site is provided in Appendix C.

4.1.4 Regional and Local Groundwater

The Site is located within the California Department of Water Resources (DWR) defined Sacramento Valley Groundwater Basin of the Sacramento River Hydrologic Region. WKA searched data on the DWR website and found no DWR monitored groundwater wells within one-half mile of the Site (DWR, 2020).

WKA also searched the State Water Resources Control Board's (SWRCB) GeoTracker website for quarterly groundwater monitoring reports completed for facilities in the immediate vicinity of the Site. No facilities are located within one-half mile of the Site (SWRCB, 2020).

4.2 Historical Use Information

WKA reviewed historical information to develop a history of the previous uses of the Site and surrounding area, in order to evaluate the Site and adjoining properties for evidence of RECs. Standard historical sources reviewed during the preparation of this report included the following, as available:

- Sanborn® Maps;
- Topographic Maps;
- Oil and Gas Well Maps;
- Aerial Photographs;
- Ownership Records;
- Building Department Records;
- Local Street Directories;
- Zoning and Land Use Records;
- Other Historical Sources; and,
- Prior Assessments.

Discussion of these historical sources is provided in the following sections.

4.2.1 Sanborn® Maps

Sanborn® Maps are obtained through Environmental Data Resources, Inc. (EDR®). EDR® is a national commercial provider of environmental database information. Sanborn® Maps are detailed drawings of site development, and were typically used by fire insurance companies to determine site fire insurability. According to EDR®, Sanborn® Map coverage of the Site is not available (EDR®, 2018a).

4.2.2 Topographic Maps

Historical USGS topographic maps with coverage of the Site and outlying land areas were reviewed. Topographic maps with coverage of the Site dated 1907, 1915/1916, 1952/1953, 1953/1954, 1968, 1975, and 2012 were available for review (EDR®, 2018b). Copies of the topographic maps compiled by EDR® with coverage of the Site are included in Appendix C. Table 1 notes the changes in the vicinity of the Site.

Table 1		
Year	**Scale**	**Observations**
1907	1: 62,500	Site: Vacant land. North: Vacant land. East: County Road 102 followed by vacant land. South: Vacant land. West: Vacant land.
1915/ 1916	1:31,680	No significant changes noted for the Site or the vicinity.
1952/ 1953	1:24,000	Site: A north-south trending road is depicted on the western portion. North: Structures are depicted and the area is labeled as "Sewage Disposal." East: Brown tick marks are depicted and the area is labeled as "Waste Water Disposal Area." South: Vacant land. West: An airstrip is depicted and the area is labeled as "Landing Field."
1953/ 1954	1:62,500	No significant changes noted for the Site or the vicinity.
1968	1:24,000	Site: Ponds are depicted. North: Ponds are depicted. East: No significant changes noted. South: East Beamer Street is depicted followed by vacant land. West: No significant changes noted.
1975	1: 24,000	Site: No significant changes noted. North: No significant changes noted. East: No significant changes noted. South: No significant changes noted. West: The landing strip is no longer depicted. A new pond is depicted.
2012	1:24,000	No significant changes noted for the Site or the vicinity.

4.2.3 Oil and Gas Well Maps

Review of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) website showed that the Site is located in the Crossroads Gas (ABD) field. Four DOGGR wells are located on or within at least one mile of the Site. The closest well is API 11320401, which was located on property east of the Site across County Road 102. The DOGGR well's spud date (the process of beginning to drill the well) was May 26, 1976; the well was abandoned on April 22, 1982 (DOGGR, 2020).

4.2.4 Aerial Photographs

Historical aerial photographs of the Site and general vicinity were compiled by EDR®. Photographs covering the years 1937, 1952, 1954, 1968, 1977, 1984, 1993, 2005, 2009, 2012, and 2016were available for review (EDR®, 2018c). Copies of the aerial photographs compiled by EDR® with coverage of the Site are included in Appendix C. Table 2 notes the changes on the property and in the vicinity.

Table 2

Year	Scale	Observations
August 1937	1" = 500'	Site: Ground markings indicating dry farm crop cultivation are visible. North: Ground markings indicating dry farm crop cultivation are visible. East: County Road 102 followed by ground markings indicating dry farm crop cultivation and a structure. South: East Beamer Street followed by ground markings indicating dry farm crop cultivation. West: Grass-covered land.
October 1952	1" = 500'	Site: Grass-covered land. North: Grass-covered land followed by wastewater treatment structures. Ground markings similar to those depicted on the topographic maps for the waste water disposal area are visible. A structure and soil berm, likely the location of the Woodland Police pistol range is visible to the northeast. East: The previously noted structure is no longer visible. Ground markings similar to those depicted on the topographic maps for the waste water disposal area are visible. South: No significant changes noted. West: The landing strip depicted on topographic maps is visible.
August 1954	1" = 500' (Poor quality photo)	No significant changes noted for the Site or the vicinity.
May 1968	1" = 500'	Site: Six ponds are visible on the southern portion. The northern boundary extends into two additional ponds. North: Ponds are visible. A structure is visible to the northeast. East: No significant changes noted. South: Grass-covered land. West: No significant changes noted.
December 1974	1" = 500'	Site: No significant changes noted. North: No significant changes noted. East: No significant changes noted. South: No significant changes noted. West: The landing strip is no longer visible. A pond is visible.

Table 2		
Year	**Scale**	**Observations**
June 1977	1" = 500'	Site: One of the ponds is no longer visible. North: No significant changes noted. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.
June 1984	1" = 500'	Site: No significant changes noted. North: No significant changes noted. East: Grass-covered land. South: No significant changes noted. West: No significant changes noted.
June 1993	1" = 500'	Site: The ponds are dry. North: The ponds are dry and structures associated with the wastewater treatment plans have been removed. East: No significant changes noted. South: No significant changes noted. West: The pond is dry.
2005	1" = 500'	Site: An area of stockpiled soils is visible on the south-central portion. North: The previously noted pistol range to the northeast is no longer visible. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.
2009	1" = 500'	No significant changes noted for the Site or the vicinity.
2012	1" = 500'	No significant changes noted for the Site or the vicinity.
2016	1" = 500'	Site: Ground markings indicate that the majority of the property has been disced. The previously noted stockpiled soils are still visible. North: Ground markings indicate that the area has been disced. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.

4.2.5 Ownership Records

Ownership information was obtained through ParcelQuest®, an on-line distributor of "Assessor-Direct property information throughout the State of California." The ownership entity for the Site was listed as "City of Woodland" (ParcelQuest®, 2020).

4.2.6 Building Department Records

WKA contacted the City of Woodland Community Development Department regarding any building permits that have been issued for the Site. No records were available for the Site APN.

4.2.7 Local Street Directories

Local street directories with coverage of the Site and adjoining properties were obtained from EDR® (EDR®, 2020d). These documents contain business listings based on street number identifiers. The Site does not have an address; therefore, it would not have been listed in city directories. A copy of the EDR® City Directory (EDR®, 2018d) is provided in Appendix C.

4.2.8 Zoning and Land Use Records

The Site use is listed as government (ParcelQuest, 2020).

The southwestern portion of the Site is located within an area of minimal flood hazard. The remainder of the Site is located within a Special Flood Hazard Area, as designated by the Federal Emergency Management Agency (FEMA). The floodplain map is provided in Appendix C.

WKA reviewed data provided on the National Pipeline Mapping System website and located one pipeline 0.25 miles west of the Site. The pipeline is noted is as being owned by Pacific Gas & Electric and is used for natural gas (NPMS, 2020).

4.2.9 Other Historical Sources

Review of additional historical sources was not warranted in order for the Environmental Professional to make a determination as to evidence of potential RECs on the Site.

4.2.10 Prior Assessments

WKA was provided with excerpts from a 2008 appraisal of "City property." According to the excerpt, a wastewater treatment plant operated on the 128.6-acre parcel that includes the Site for approximately 30 years. Operations of the wastewater treatment plant ended in 1988. Sludge was removed from the former sewer ponds in 1996. Approximately 1.5 acres of land on the eastern portion was used by the Woodland Police Department as a pistol range from the 1940s to 1994. Spent bullets were reportedly still present in the gun range area and concentrations of lead in soil exceeded limits established in the California Code of Regulations. The excerpt did not provide enough information to precisely locate the former gun range on the

128.6-acre parcel; however, review of historical aerial photographs indicates that it was located 0.12 miles north of the Site.

The excerpt also indicated that 1,300 cubic yards of hydrocarbon impacted soils were placed on the southeastern portion of the Site near East Beamer Street and County Road 102.

WKA prepared a Stockpile Soil and Sampling Analysis Report, dated May 29, 2020, regarding soil samples collected from the soil stockpile that is located on the south-central portion of the Site. WKA collected five soil samples from the stockpiled soil for analysis of petroleum hydrocarbons, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), and the California Assessment Manual 17 listed metals (CAM 17 metals). Laboratory analysis indicated that OCPs, VOCs, and PCBs were not detected above laboratory reporting limits. Concentrations of metals did not exceed screening levels, except arsenic. Concentrations of arsenic in the stockpile soil samples ranged from 4.7 to 7.1 milligrams per kilogram, which WKA concluded were below expected background concentrations. Total Petroleum Hydrocarbons as motor oil (TPH-mo) was detected above the respective laboratory limit with results ranging from 1,200 mg/kg to 2,200 mg/kg, below the USEPA screening level of 230,000 mg/kg. Concentrations of SVOCs were not detected above the laboratory reporting limit; however, some of the laboratory reporting limits exceed the Department of Toxic Substances Control HERO Note 3 screening levels. WKA conferred with the laboratory and learned that samples were diluted due to the concentrations of TPH-mo that were present. The laboratory indicated that the method detection limits (MDLs) could be used in-lieu of the reporting limits; however, 13 SVOCs MDLs exceeded screening levels. WKA concluded that no evidence suggests that the compounds are present, but that their presence could not be ruled out. WKA recommended that the stockpiled soil be relocated outside the project area or disposed of at an appropriately licensed disposal facility. WKA further recommends that accurate records of any stockpile relocation or disposal be combined with this report and kept by the City to facilitate future decision making.

4.3 Environmental Record Sources

4.3.1 Regulatory Agency Databases

EDR® was contacted to provide a summary of facilities listed on regulatory agency databases (EDR®, 2020a). Table 3 summarizes the researched ASTM required *Standard Environmental Record Sources*, as well as several *Additional Environmental Record Sources*, as defined in Sections 8.2.1 and 8.2.2 of the ASTM Standard. For additional reference, the EDR® Radius Map Report with GeoCheck is included in Appendix D.

Table 3			
	EDR Listed Database	*ASTM E 1527-13 Search Distance*	No. of Facilities Listed (within Search Radius)
Federal			
Federal NPL Site List	*NPL*	1-mile	0
Federal Delisted NPL Site List	*Delisted NPL*	½-mile	0
Federal CERCLIS List	*CERCLIS*	½-mile	0
Federal CERCLIS NFRAP Site List	*CERCLIS NFRAP*	½-mile	0
Federal RCRA CORRACTS Facilities List	*CORRACTS*	1-mile	0
Federal RCRA Generators List:			
Small Quantity and Large Quantity Generators	*RCRA SQG*	Site & adjoining	0
	RCRA LQG		0
Landfills and Solid Waste Management Units	*RCRA TSDF*	½-mile	0
Federal Institutional Control / Engineering Control Registries	*US ENG Controls*	Site only	0
	US INST Controls		0
Federal ERNS List	*ERNS*	Site only	0
State			
State-equivalent NPL (Hist. Cal-Sites)	*Hist. Cal-Sites*	1-mile	1
State-equivalent CERCLIS	*RESPONSE*	½-mile	0
State Landfill and/or Solid Waste Disposal Site	*SWF/LF (SWIS)*	½-mile	0
	WMUDS/SWAT		0
State Leaking Underground Storage Tanks	*LUST- Reg 5 Geotracker*	½-mile	0
Tribal Leaking Underground Storage Tanks	*Indian LUST*	½-mile	0
State Registered Underground Storage Tanks	*UST*	Site & adjoining	0
Tribal Registered Underground Storage Tanks	*Indian UST*	Site & adjoining	0
State Registered Aboveground Storage Tanks	*AST*	Site & adjoining	0
State Institutional Control Registries	*DEED*	Site only	0
State Voluntary Cleanup Sites	*VCP*	½-mile	0
State Brownfield Sites	*US Brownfields*	½-mile	0
California Environmental Reporting System Hazardous Waste	*CERS Haz Waste*	¼-mile	1
Additional Environmental Record Sources			
Hazardous Waste & Substances Sites List	*CORTESE*	½-mile	0
DTSC EnviroStor (includes Cal-Sites)	*EnviroStor*	1-mile	1
SLIC	*SLIC - Reg 5*	½-mile	0
Cleaner Facilities	*Drycleaners*	¼-mile	0
HAZNET	*HAZNET*	¼-mile	2

Review of the EDR® report indicates the Site is not listed on any of the EDR® databases. Regulatory information reviewed concerning the nearest facility in each cardinal direction identified within its respective ASTM search distance is detailed below.

The EDR Radius Report identified two Department of Toxic Substances Control (DTSC) Haznet listings within 0.25 miles of the Site. The DTSC Haznet database is a list of all facilities that have submitted manifests for the disposal of hazardous waste at a landfill. A listing on the database is not considered to be indicative of a release of a hazardous material or petroleum product at a property.

The Rite Aid facility, 1755 East Beamer Street, was located 0.49 miles west of the Site. The facility is listed on the State Water Resources Control Board's Leaking Underground Storage Tank database. According to a California Regional Water Quality Control Board Central Valley Region letter, dated October 18, 2011, the facility received a no further action status. Based on the information reviewed, this facility has not impacted the Site.

4.3.2 Preliminary Screen for Vapor Encroachment Conditions

WKA conducted a preliminary screening for VEC beneath the Site using the Tier 1 vapor encroachment screening evaluation[1]. The Tier I screening included performing a *Search Distance Test* to identify if there are any known or suspect contaminated properties surrounding or upgradient of the Site within specific search radii, and a *Chemicals of Concern (COC) Test* (for those known or suspect contaminated properties identified within the *Search Distance Test*) to evaluate whether or not COC are likely to be present. The Vapor Encroachment Screening Matrix is included in Appendix E.

Based on the completion of the VEC-screening matrix, a VEC can be ruled out because a VEC does not or is not likely to exist.

4.3.3 Environmental Lien Search

The City of Woodland did not authorize WKA to conduct a search for environmental liens and AULs. Mr. Steve Coyle, City of Woodland, was not aware of any environmental liens that have been recorded for the Site.

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[1] The Preliminary Screen for Vapor Encroachment Conditions was based on the guidelines presented in the ASTM *E 2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Data Gaps

The time intervals between the Standard Historical Sources (i.e., topographic maps, aerial photographs, other historical sources) exceeded the ASTM minimum five-year period. However, the use of the Site appears unchanged within the time gaps, and therefore, research of the Site use during the time gaps is not required by the ASTM Standard (Refer to *Section 8.3.2.1 – Intervals* of the ASTM E 1527-13 standard).

It is the opinion of WKA that no significant data gaps were identified during the preparation of this report that affects the ability of the Environmental Professional to identify RECs on the Site.

5.2 Conclusions

- The historical land use research dating back to the early 1900s revealed that the Site was grass-covered land from at least 1937 to at least 1954. It was developed with three ponds and extended to the north into three additional ponds associated with the City of Woodland wastewater treatment plant from at least 1968 to at least 1974. Two of the ponds and a portion of the third have been backfilled.
- According to information provided to WKA, approximately 1,300 cubic yards of petroleum hydrocarbon impacted soil were placed on the south-central portion of the Site in 1993. Additional soil from public works projects have been placed in the vicinity of the hydrocarbon impacted soils.
- WKA collected five soil samples from the soil stockpile located on the south-central portion of the Site. Laboratory analysis of the soil samples indicated that organochlorine pesticides, volatile organic compounds, and polychlorinated biphenyls were not present in soils above laboratory reporting limits. Concentrations of metals, except arsenic, and Total Petroleum Hydrocarbons as motor oil were reported but did not exceed environmental screening levels. Concentrations of arsenic detected in the soil samples exceed environmental screening levels; however, there were below expected background concentrations. TPH-as-motor oil was detected above the respective laboratory limit with results ranging from 1,200 mg/kg to 2,200 mg/kg; below the USEPA screening level of 230,000 mg/kg. Semi-volatile organic compounds were not detected in the soil samples; however, due to the sample having been diluted, the laboratory reporting limits were elevated above environmental screening levels. On the advice of the laboratory, WKA used the method reporting limit for comparison, however, 13 compounds had method reporting limits that still exceeded environmental screening

levels. WKA concluded that the soil stockpiles should either be relocated out of the project footprint or disposed at an appropriately licensed facility (See Section 4.2.10).

- WKA observed two areas with recently placed soil piles on the western portion of the Site. One area of soil was located in the southwestern pond and the second area was located between the two western ponds. Additional soil stockpiles or end dump piles may have been obscured by vegetation.
- WKA understands that all stockpiled soils will be removed from the property prior to redevelopment.
- Given the documentation reviewed concerning the agency listings for neighboring facilities, none of the facilities reviewed is likely to have a negative impact on the Site.
- Based on the completion of the vapor encroachment condition (VEC) screening matrix, WKA concludes a VEC can be ruled out because a VEC does not or is not likely to exist.

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 for the East Beamer Housing Project Property. Any exceptions to, or deletions from, this practice are described in Section 5.4 of this report. This assessment has revealed no evidence of RECs in connection with the Site except the following:

- On-site concerns were noted from the unknown origins of soils stockpiled on the western portion of the Site. End dump piles of soil were observed in the southwestern pond and in the area between two western ponds. Additional stockpiles or end dump piles may have been obscured by vegetation.
- On-site concerns were noted from the unknown origins of soils used to backfill former wastewater treatment ponds.

5.3 Recommendations

Based on the conclusions presented and the documentation contained herein, WKA makes the following recommendations:

- Soil samples should be collected from areas where former wastewater treatment ponds have been backfilled.
- Soils that have been placed on the western portion of the Site should be moved to a different City of Woodland owned property. If the soil will be used for redevelopment, it should be sampled prior to reuse.
- The stockpiled soil on the south-central portion of the Site should either be relocated to a different City of Woodland property or disposed at an appropriately licensed facility. The

recommendations of the WKA Stockpile Soil Sampling and Analyses Report should be followed.

5.4 Exceptions and/or Deletions

No exceptions or deletions from the ASTM E 1527-13 standard were made during the performance of this ESA.

5.5 Additional Services

Non-scope considerations, such as assessment for naturally occurring asbestos (NOA), wetlands evaluation, indoor air quality, laboratory testing of the soils and groundwater beneath the Site for environmental contaminants (such as agricultural-related pesticides, termiticides, polychlorinated biphenyls [PCBs], or arsenic and lead), and assessments for asbestos containing materials and lead-based paint were not included or requested as part of this ESA. Additionally, this ESA included conducting a Tier 1 vapor encroachment screening in accordance with the ASTM *E 2600-15 Vapor Encroachment Screening on Property Involved in Real Estate Transactions.*

6.0 LIMITATIONS

The statements and conclusions in this report are based upon the scope of work described above and on observations made only on the date of the field reconnaissance, May 19, 2020. Work was performed using a degree of skill consistent with that of competent environmental consulting firms performing similar work in the area. Information regarding the Site that is *publicly available* and *practically reviewable,* as described in the ASTM standard, was obtained. Additional research or receipt of information regarding the Site that was not disclosed or available to WKA during this assessment may result in revision of the conclusions. The conclusions in this report should be reevaluated if site conditions change. No recommendation is made as to the suitability of the Site for any purpose. The results of this assessment do not preclude the possibility that materials currently or in the future defined as hazardous are present on the Site, nor do the results of this work guarantee the potability of groundwater beneath the Site. This report is applicable only to the investigated Site and should not be used for any other property. No warranty is expressed or implied.

This report is viable for one year from the publication date of the report provided the following components are updated within 180 days of the date of purchase or (for transactions not involving an acquisition) the date of the intended transaction:

- Interviews with current owners/occupants and/or in order to identify changes in Site conditions or uses since the publication date of this report
- Searches for recorded environmental cleanup liens
- Visual inspection of the Site and of adjoining properties with emphasis on changes in conditions or uses since the publication date of this report
- A current review of federal, state, tribal and county databases
- The declaration by the environmental professional responsible for the assessment.

Environmental Site Assessments completed more than one year prior to the date of purchase must be reviewed and updated in order for the *Environmental Site Assessment* to be considered valid per Section 4.6 (*Continued Viability of Environmental Site Assessment*), and Sections 4.7 and 8.4 (*Prior Assessment Usage*) of the ASTM E 1527-13 Standard.

NMM:KMB:mr
H:/dept3/12185.04P - Phase I ESA East Beamer Housing Project Property

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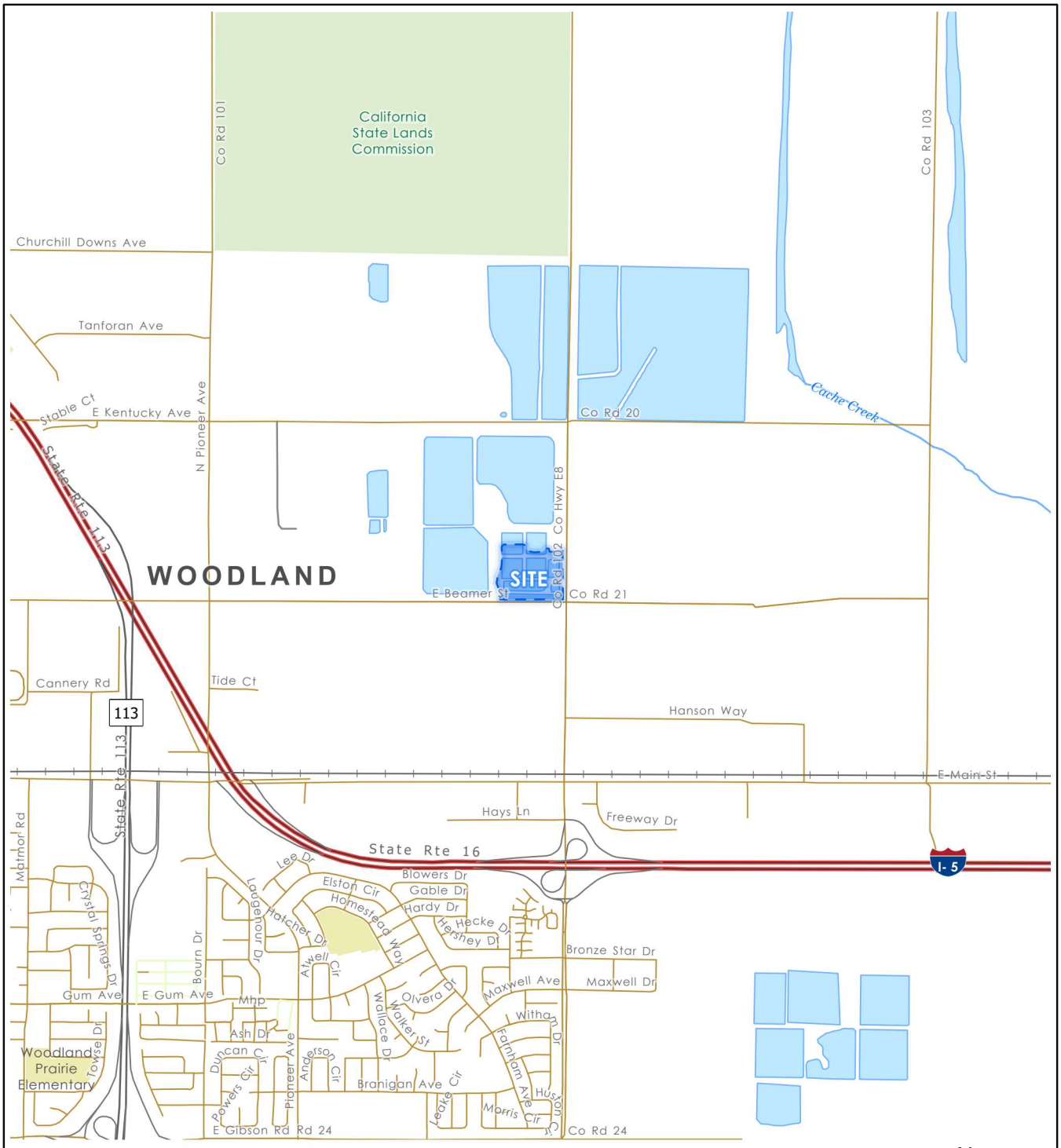
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FIGURES



Spatial Data provided by Esri, NOAA, and USGS.
Projection: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

WallaceKuhl & ASSOCIATES

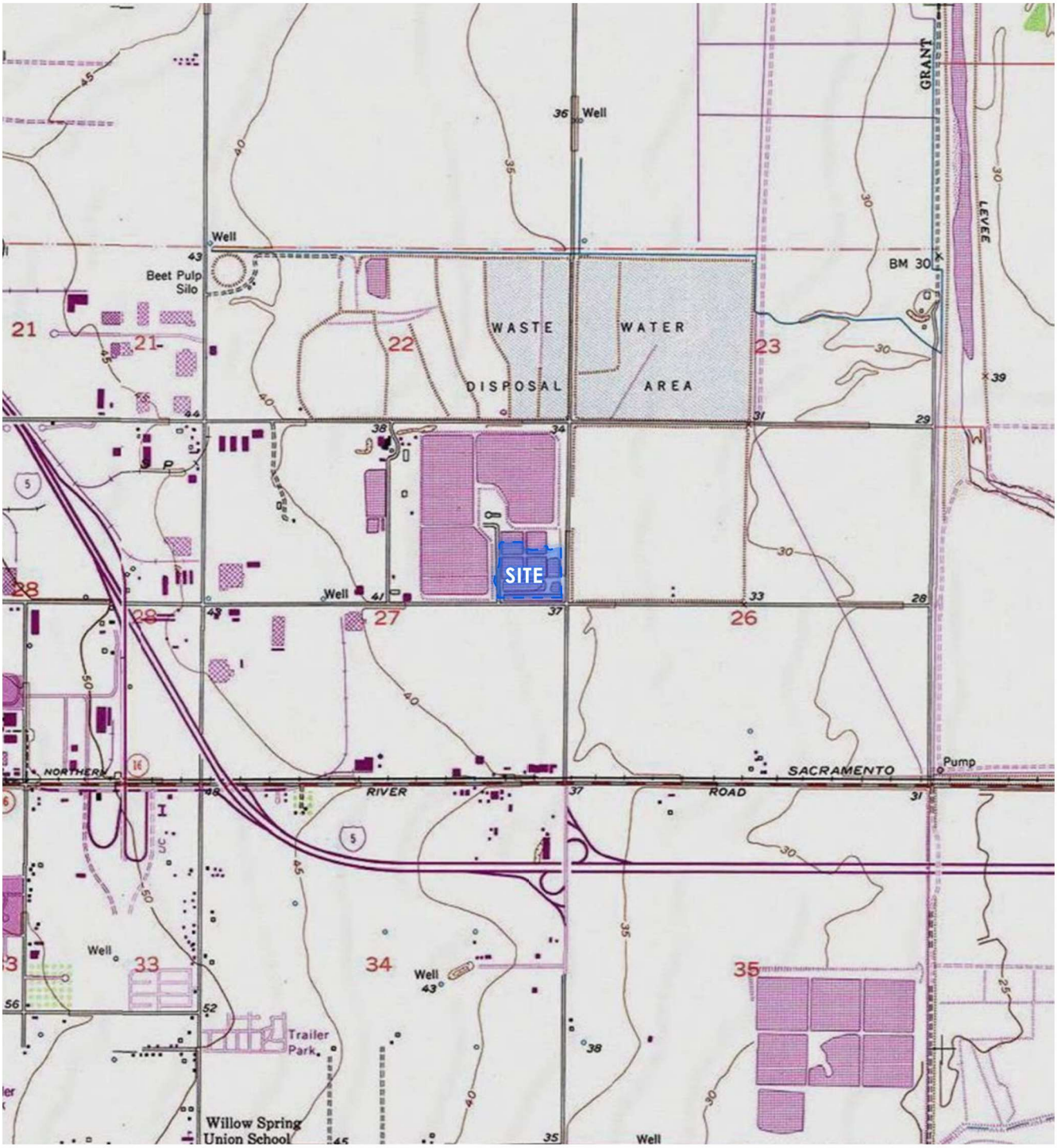
VICINITY MAP

EAST BEAMER HOUSING PROJECT PROPERTY

Woodland, California

FIGURE	1
DRAWN BY	RWO
CHECKED BY	NMM
PROJECT MGR	KMB
DATE	05/2020

WKA NO. 12185.04P



N

0 1,000 2,000

Feet

Topographic Basemap Adapted from the USGS 7.5' Digital Map Series
Projection: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

WallaceKuhl & ASSOCIATES

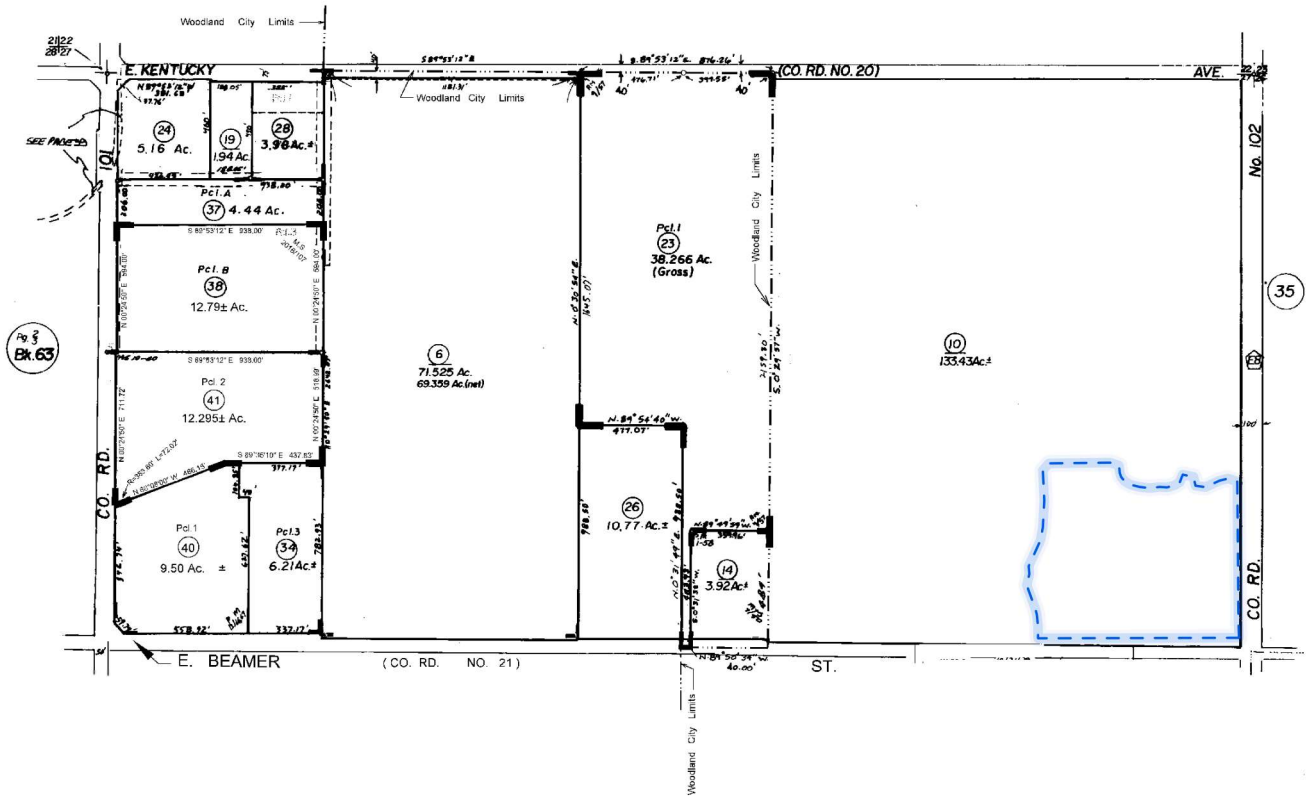
TOPOGRAPHIC MAP

EAST BEAMER HOUSING PROJECT PROPERTY

Woodland, California

FIGURE	2
DRAWN BY	RWO
CHECKED BY	NMM
PROJECT MGR	KMB
DATE	05/2020

WKA NO. 12185.04P



Approximate Site Boundary

N

0 400 800

Feet

Parcel Map provided by the County of Yolo
Assessor's Map Book 27, Page 36.
Projection: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

WallaceKuhl & ASSOCIATES

PARCEL MAP

EAST BEAMER HOUSING PROJECT PROPERTY

Woodland, California

FIGURE	3
DRAWN BY	RWO
CHECKED BY	NMM
PROJECT MGR	KMB
DATE	05/2020
WKA NO. 12185.04P	



Approximate Site Boundary

N

0 75 150
Feet

Aerial imagery provided by Esri.
Projection: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

WallaceKuhl & ASSOCIATES

AERIAL SITE MAP

EAST BEAMER HOUSING PROJECT PROPERTY

Woodland, California

FIGURE	4
DRAWN BY	RWO
CHECKED BY	NMM
PROJECT MGR	KMB
DATE	05/2020
WKA NO. 12185.04P	



Looking northwest at the general view of the Site.



Looking east at an east-west trending soil stockpile on the southern portion of the Site.



Looking at soil that was recently placed on the western portion of the Site.



Looking at one of the former wastewater treatment ponds located on the Site.

Wallace Kuhl & Associates

COLOR PHOTOGRAPHS

EAST BEAMER HOUSING PROJECT PROPERTY

Woodland, California

FIGURE	5
DRAWN BY	NMM
CHECKED BY	KMB
PROJECT MGR	KMB
DATE	5/20

WKA NO. 12185.04P

APPENDIX A

RESUMES

NANCY M. MALARET

PROJECT ENVIRONMENTAL SCIENTIST

Ms. Malaret has been employed in the environmental field since 2003. She graduated from University of California, Davis with a degree in Hydrologic Science.

Ms. Malaret worked for the Florida Department of Health for four years. She assisted with the coordination of sampling potable water wells throughout the state of Florida. Ms. Malaret used GIS mapping techniques to identify private potable wells located near commercial and industrial facilities that may have contaminated the groundwater. She coordinated the sampling of the wells and the analysis of water samples collected. She worked with the Florida Department of Environmental Protection to place filters on the private wells with contaminated water. Ms. Malaret also worked with the Health Assessment Team at the Florida Department of Health. She conducted human health risk assessments based on groundwater and soil data collected during contamination assessments of industrial facilities. Ms. Malaret used the Agency for Toxic Substances and Disease Registry's Public Health Assessment Guidelines to evaluate resident's risk of illness from exposure to contaminated groundwater and surface soils. Ms. Malaret used Risk Assistant software to determine dose estimates and compared the results with toxicological studies. Ms. Malaret's human health risk assessments focused on sites with Volatile Organic Compounds, Semi-volatile Organic Compounds, and metals contamination.

Ms. Malaret has six years of experience in due diligence. Her Phase I Environmental Site Assessment experience includes wooded, rural, and urban properties. Her investigations have involved multiple parcel sites with extensive history, large-scale residential subdivisions, office buildings, gasoline stations, dry cleaners, and heavy equipment manufacturing and repair facilities. Ms. Malaret has conducted multiple corridor assessments along roadways being prepared for expansion or improvements. She also conducted a Hazardous, Toxic, and Radioactive Waste Assessment for the United States Army Corps of Engineers on a 20-mile stretch of the St. Johns River in Jacksonville, Florida. Ms. Malaret conducted soil and groundwater sampling associated with Phase II Environmental Site Assessments. Ms. Malaret coordinated long-term groundwater sampling events for sites with residual petroleum contamination.

Ms. Malaret has worked with communities impacted by contamination, local, state, and federal government agencies, banks and developers.

Moody Property, Vacaville, CA: Ms. Malaret managed the Phase I Environmental Site Assessment of a 38.5-acre property of undeveloped land located in Vacaville to support the redevelopment of the property into a residential development.

Woodmere Property, Folsom, CA: Ms. Malaret managed the Phase I Environmental Site Assessment of a 2.5-acre property developed with an office building. Historical research of the property included evaluating former mining operations at the site.

Mercantile Property, Rancho Cordova, CA: Ms. Malaret managed the Phase I Environmental Site Assessment of a 4.1-acre property developed with a commercial building. Evaluation of regulatory facilities within the site vicinity included the former Aerojet Facility.

HIGHER EDUCATION:

University of California, Davis
Bachelor of Science, Hydrologic Science (1999)

KURT M. BALASEK

SENIOR HYDROGEOLOGIST/DIRECTOR OF ENVIRONMENTAL SERVICES

Mr. Balasek has provided a leadership role in hydrogeologic and environmental consulting in the Western US. since 1989. His experience includes, residential and commercial land development, litigation support, permitting, regulatory compliance and technical team building. Mr. Balasek and his team have conducted a wide range of impacted soil and groundwater investigations, mine location and reclamation activities, water resource evaluations and conjunctive use studies. Mr. Balasek has supported municipal efforts to redevelop blighted neighborhoods using private and federal funding and has prepared successful grant applications for EPA Brownfield funding. Mr. Balasek has facilitated public stakeholder processes, organized public comments and used the information gathered from these efforts to prioritize neighborhood and regional site investigations and remedial activities.

Mr. Balasek specializes in unique approaches to problem solving and leverages nearly 30 years of regulatory relationships to assist clients facing enforcement actions. Mr. Balasek has saved his clients hundreds of thousands of dollars in reduced fines, monitoring requirements or realized project efficiencies.

SELECTED PROJECT EXPERIENCE

Stockton Worknet, Stockton, CA: Project was conducted for the City of Stockton Redevelopment Agency and involved delineation, removal and disposal for hydrocarbon and lead-contaminated soil discovered during a construction project. The project also involved a component of public outreach because a children's museum was located immediately adjacent to the site.

Hayden Hill Mine, Lassen, CA: Project consisted of third party review of mine closure plan for Lassen County. Provided technical assistance to Lassen County Planning Commission to facilitate permanent closure of large open pit mine.

Willow Creek, Folsom, CA: Project involved site investigation and subsequent removal of petroleum hydrocarbon-contaminated soil to facilitate private development of commercial property. Under my direction, I facilitated the investigation, excavation and coordination of closure petitions.

City of West Sacramento, West Sacramento, CA: Multiple Projects. These projects involved initial site evaluation of several hundred individual sites for the redevelopment of West Sacramento. Subsequent work involved site investigation and remediation of several sites under U.S. EPA Grants. Provided technical assistance to City staff and collaborated with them to best utilize the public funds and coordinate public outreach. Provided emergency consultation related to peroxide release at city water treatment plant and provides on-going management and monitoring of groundwater pump and treat system at the Port of Sacramento

Rominger Property, Winters, CA (on-going): This project involves detailed site investigation, hydrogeologic analysis and evaluation, and the selection of appropriate remediation technologies for a large plume of (MTBE) contamination on an Ag-industrial site. Project involvement included client and regulatory interaction.

HIGHER EDUCATION:

University of California, Santa Barbara
BA, Geological Sciences (1986)
California State University, Chico
MS, Hydrogeology/Hydrology (1990)

PROFESSIONAL REGISTRATIONS:

Professional Geologist No. 6162, CA
Certified Hydrogeologist No. 299, CA
Qualified Storm Water Developer
California Engineering Contractor A-Haz, C-57,

APPENDIX B

ASTM E 1527-13 User Questionnaire
and Helpful Documents Checklist

HELPFUL DOCUMENTS
EAST BEAMER HOUSING PROJECT PROPERTY

Are you aware of any of the below-listed reports, as they relate specifically to the property?

_____ Yes ____ No (if yes, please check all that apply):

- ❑ Environmental Site Assessment reports (Phase I ESA, Asbestos sampling reports, etc.)
- ❑ Environmental Compliance Audit reports
- ❑ Geotechnical Reports
- ❑ Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits)
- ❑ Registrations for underground or above ground storage tanks
- ❑ Registrations for underground injection systems
- ❑ Material Safety Data Sheets
- ❑ Community Right-to-Know plan
- ❑ Safety Plan
- ❑ Reports regarding Hydrogeologic conditions on the property or surrounding area
- ❑ Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property
- ❑ Hazardous waste generator notices, or reports
- ❑ Environmental Impact Reports (draft and/or final) Raney Planning IS/MND draft, not cirulated
- ❑ Risk assessments
- ❑ Recorded AULs

If any of the above listed documents are available, will copies be provided to WKA for review?

_____ Yes ____ No

Completed by Stephen Coyle

Date: May 20, 2020

Title: Community Development Deputy Director

Signature: 

E 1527-13 USER QUESTIONNAIRE
EAST BEAMER HOUSING PROJECT PROPERTY

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user*[2] must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

(1.) Have you performed a search for environmental cleanup liens and AULs, as described under *User Obligations* in the attached proposal, for the *property? No*

(2.) Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law? No

(3.) Are you aware of any AULs, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? No

(4.) As the *user* of the report, 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? No

(5.) 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 on the *property*? NA

(6.) 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, as user,

(a.) Do you know the past uses of the *property*? Yes If so, what were they?
See Interview Questions (Interview questions-sc.pdf)

(b.) What, if any, specific chemicals are present or once were present at the *property*?
See Wallace Kuhl & Associates current soil analysis of specific pile of soil

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[2] User, as defined in the ASTM Standard is "the party seeking to use Practice E 1527 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The user has specific obligations for completing a successful application of this practice as outline in Section 6 [of the ASTM Standard]."

E 1527-13 USER QUESTIONNAIRE (cont.)
EAST BEAMER HOUSING PROJECT PROPERTY

Questions 6 continued:

(c.) What, if any, spills or other chemical releases have taken place at the *property*?
See Interview Questions (Interview questions-sc.pdf)

(d.) What, if any, environmental cleanups have taken place at the *property*?
See Interview Questions (Interview questions-sc.pdf)

(7.) As the *user* of this ESA, 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*? See Interview Questions (Interview questions-sc.pdf)

COMPLETION:

I have completed this User Questionnaire to the best of my knowledge and provided all information to the environmental professional as of the following date:

Completed by: Stephen Coyle

Date: May 20, 2020

Title: Community Development Deputy Director

Signature: 

Phone Number: 530-661-5910

Relationship to the Site (i.e., owner, lender, property manager): City representative

APPENDIX C

Supporting Documents

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Yolo County, California



May 19, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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Wc—Willows clay, 0 percent slopes, sodic, MLRA 17..... 16
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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:2,050 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Yolo County, California
Survey Area Data: Version 15, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 26, 2019—May 1, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
M-W	Miscellaneous water	10.1	60.7%
Pb	Pescadero silty clay, saline-alkali	1.9	11.6%
St	Sycamore silty clay loam, drained, 0 percent slopes, MLRA 17	4.3	25.7%
Wc	Willows clay, 0 percent slopes, sodic, MLRA 17	0.3	1.9%
Totals for Area of Interest		**16.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Yolo County, California

M-W—Miscellaneous water

Map Unit Composition

Water, miscellaneous: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water, Miscellaneous

Setting

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear

Pb—Pescadero silty clay, saline-alkali

Map Unit Setting

National map unit symbol: hdwn
Elevation: 10 to 100 feet
Mean annual precipitation: 16 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Pescadero and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pescadero

Setting

Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 3 inches: silty clay
H2 - 3 to 40 inches: silty clay
H3 - 40 to 67 inches: silty clay loam
H4 - 67 to 95 inches: stratified loam to silty clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 90.0
Available water storage in profile: Moderate (about 6.3 inches)

Interpretive groups
Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Riz
Percent of map unit: 5 percent
Hydric soil rating: No

Capay
Percent of map unit: 4 percent
Hydric soil rating: No

Willows
Percent of map unit: 4 percent
Landform: Basin floors
Hydric soil rating: Yes

Marvin
Percent of map unit: 2 percent
Hydric soil rating: No

St—Sycamore silty clay loam, drained, 0 percent slopes, MLRA 17

Map Unit Setting
National map unit symbol: 2xcbr
Elevation: 20 to 80 feet
Mean annual precipitation: 20 to 21 inches
Mean annual air temperature: 61 to 62 degrees F
Frost-free period: 319 to 330 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Sycamore and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sycamore

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 4 inches: silty clay loam
A - 4 to 14 inches: silty clay loam
Bw - 14 to 26 inches: silty clay loam
Bwk - 26 to 44 inches: silty clay loam
C - 44 to 60 inches: loam

Properties and qualities

Slope: 0 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 60 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline (0.2 to 0.7 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Maria

Percent of map unit: 3 percent
Landform: Alluvial fans
Hydric soil rating: Yes

Merritt

Percent of map unit: 3 percent
Hydric soil rating: No

Tyndall

Percent of map unit: 3 percent
Hydric soil rating: No

Yolo

Percent of map unit: 3 percent
Hydric soil rating: No

Brentwood
Percent of map unit: 3 percent
Hydric soil rating: No

Wc—Willows clay, 0 percent slopes, sodic, MLRA 17

Map Unit Setting
National map unit symbol: 2y0fg
Elevation: 30 to 50 feet
Mean annual precipitation: 20 to 21 inches
Mean annual air temperature: 62 to 62 degrees F
Frost-free period: 322 to 330 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Willows and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Willows

Setting
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile
Apg - 0 to 4 inches: clay
Bssg - 4 to 13 inches: clay
Bknssg - 13 to 28 inches: clay
Bnssg1 - 28 to 38 inches: clay
Bnssg2 - 38 to 48 inches: clay
Bnssg3 - 48 to 61 inches: silty clay
Bnssg4 - 61 to 72 inches: silty clay

Properties and qualities
Slope: 0 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: About 0 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 2 percent

Gypsum, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (1.0 to 3.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 35.0
Available water storage in profile: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Hydric soil rating: Yes

Minor Components

Pescadero

Percent of map unit: 5 percent
Hydric soil rating: No

Riz

Percent of map unit: 5 percent
Hydric soil rating: No

Willows, clay

Percent of map unit: 5 percent
Landform: Basin floors
Hydric soil rating: Yes

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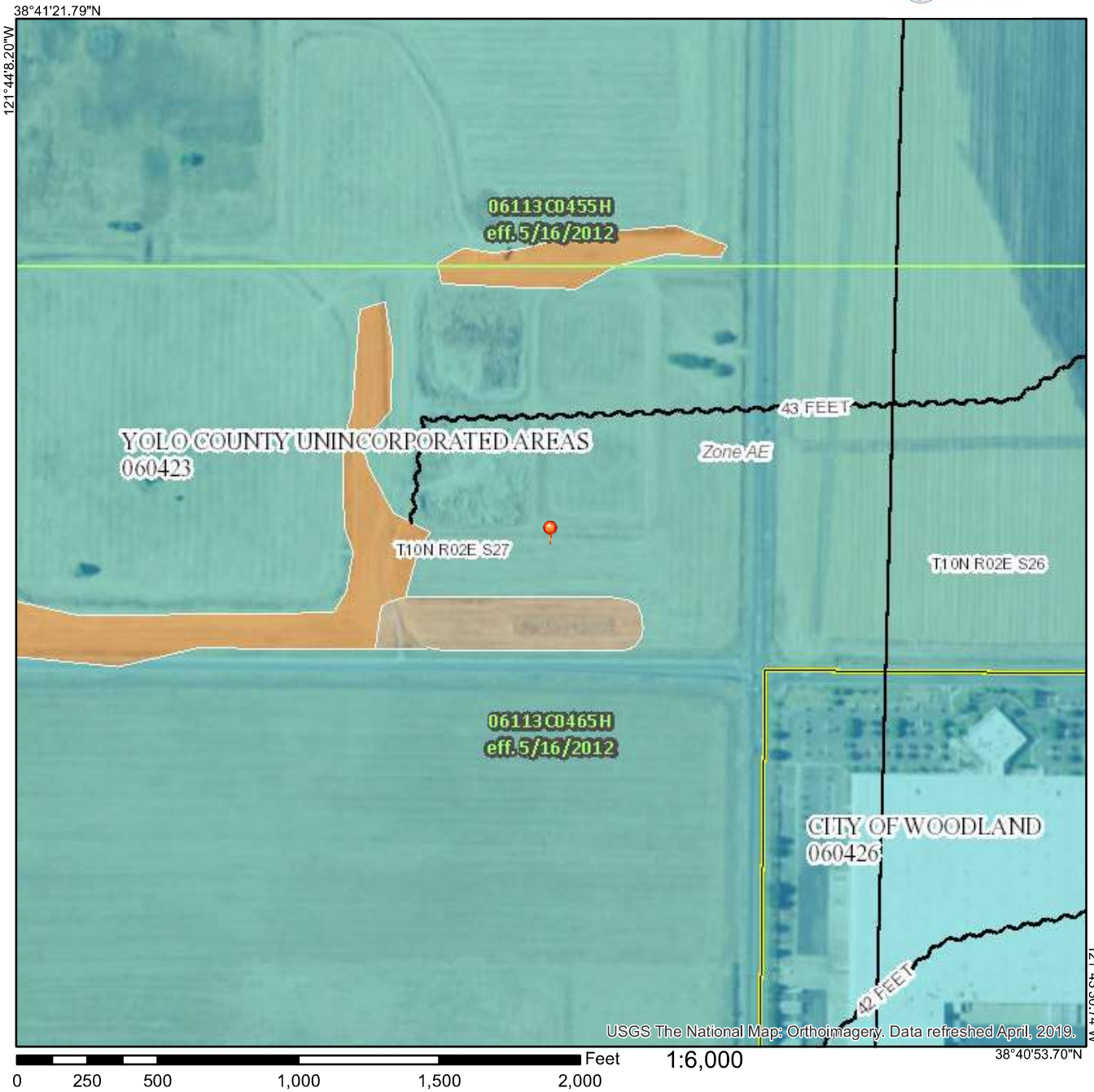
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National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/19/2020 at 2:37:28 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

8-Acre Property
County Road 102
Woodland, CA 95776

Inquiry Number: 5508848.3
December 11, 2018

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

12/11/18

Site Name:

8-Acre Property
County Road 102
Woodland, CA 95776
EDR Inquiry # 5508848.3

Client Name:

Wallace - Kuhl & Associates
3050 Industrial Boulevard
West Sacramento, CA 95691
Contact: Nancy Malaret

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Certified Sanborn Results:

Certification # A2E8-46B1-A554

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Sanborn® Library search results

Certification #: A2E8-46B1-A554

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8-Acre Property
County Road 102
Woodland, CA 95776

Inquiry Number: 5508848.4
December 11, 2018

EDR Historical Topo Map Report

with QuadMatch™

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

EDR Historical Topo Map Report

12/11/18

Site Name:	Client Name:
8-Acre Property	Wallace - Kuhl & Associates
County Road 102	3050 Industrial Boulevard
Woodland, CA 95776	West Sacramento, CA 95691
EDR Inquiry # 5508848.4	Contact: Nancy Malaret

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Search Results:		*Coordinates:*	
P.O.#	NA	**Latitude:**	38.685 38° 41' 6" North
Project:	12185.01	**Longitude:**	-121.7306 -121° 43' 50" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	610407.28
		UTM Y Meters:	4282586.16
		Elevation:	38.00' above sea level

Maps Provided:

2012
1975
1968
1953, 1954
1952, 1953
1915, 1916
1907

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

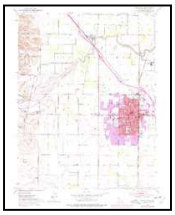


Woodland
2012
7.5-minute, 24000



Grays Bend
2012
7.5-minute, 24000

1975 Source Sheets

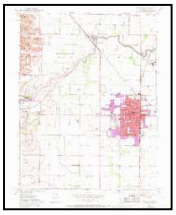


Woodland
1975
7.5-minute, 24000
Aerial Photo Revised 1975



Grays Bend
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1968 Source Sheets



Woodland
1968
7.5-minute, 24000
Aerial Photo Revised 1968

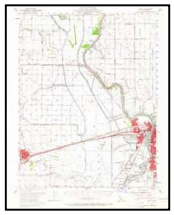


Grays Bend
1968
7.5-minute, 24000
Aerial Photo Revised 1949

1953, 1954 Source Sheets



Woodland
1953
15-minute, 62500
Aerial Photo Revised 1949



Davis
1954
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1952, 1953 Source Sheets



Woodland
1952
7.5-minute, 24000
Aerial Photo Revised 1949



Grays Bend
1953
7.5-minute, 24000
Aerial Photo Revised 1949

1915, 1916 Source Sheets



Yolo
1915
7.5-minute, 31680



Grays Bend
1916
7.5-minute, 31680

1907 Source Sheets



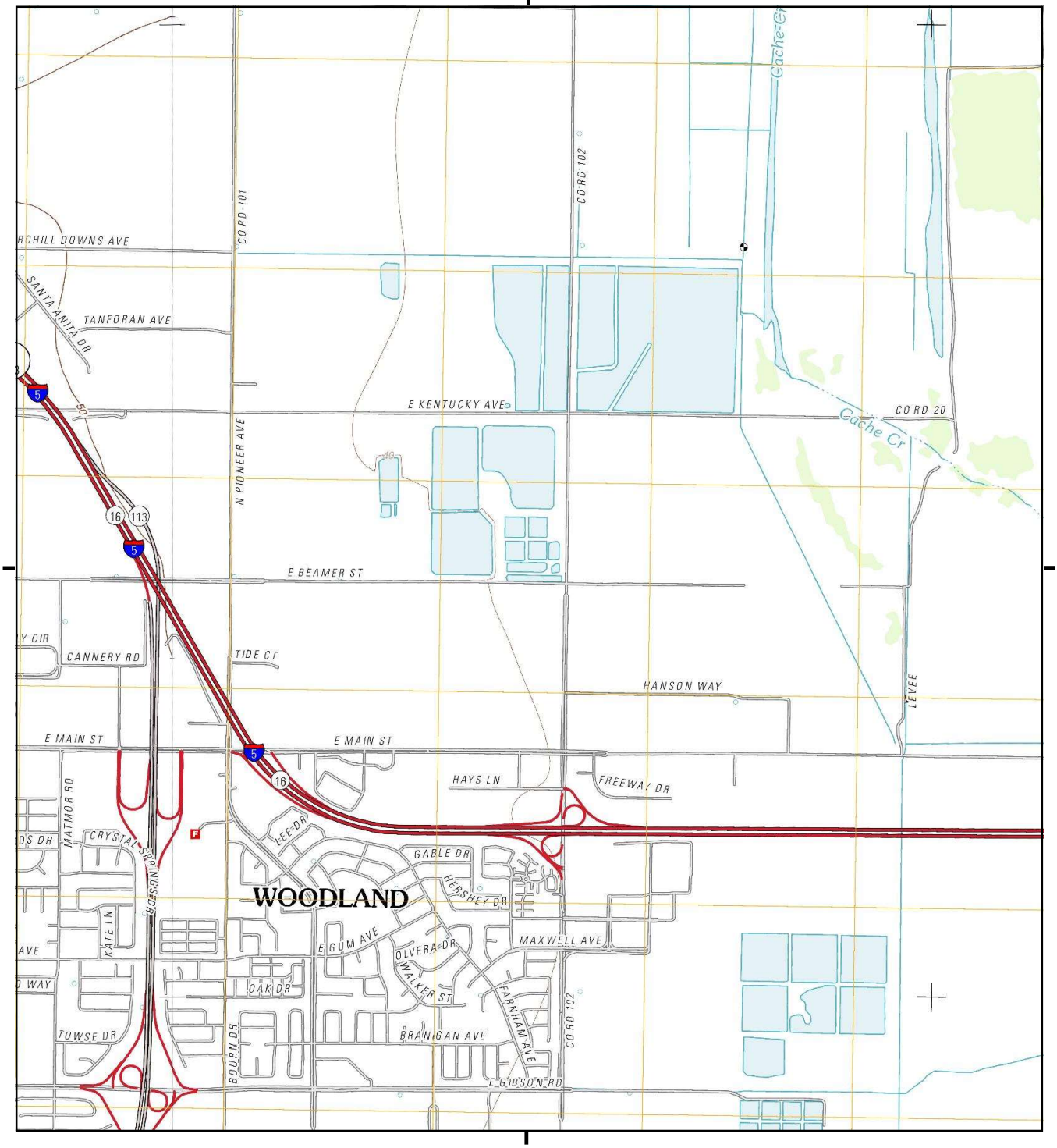
Woodland
1907
15-minute, 62500



Davisville
1907
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

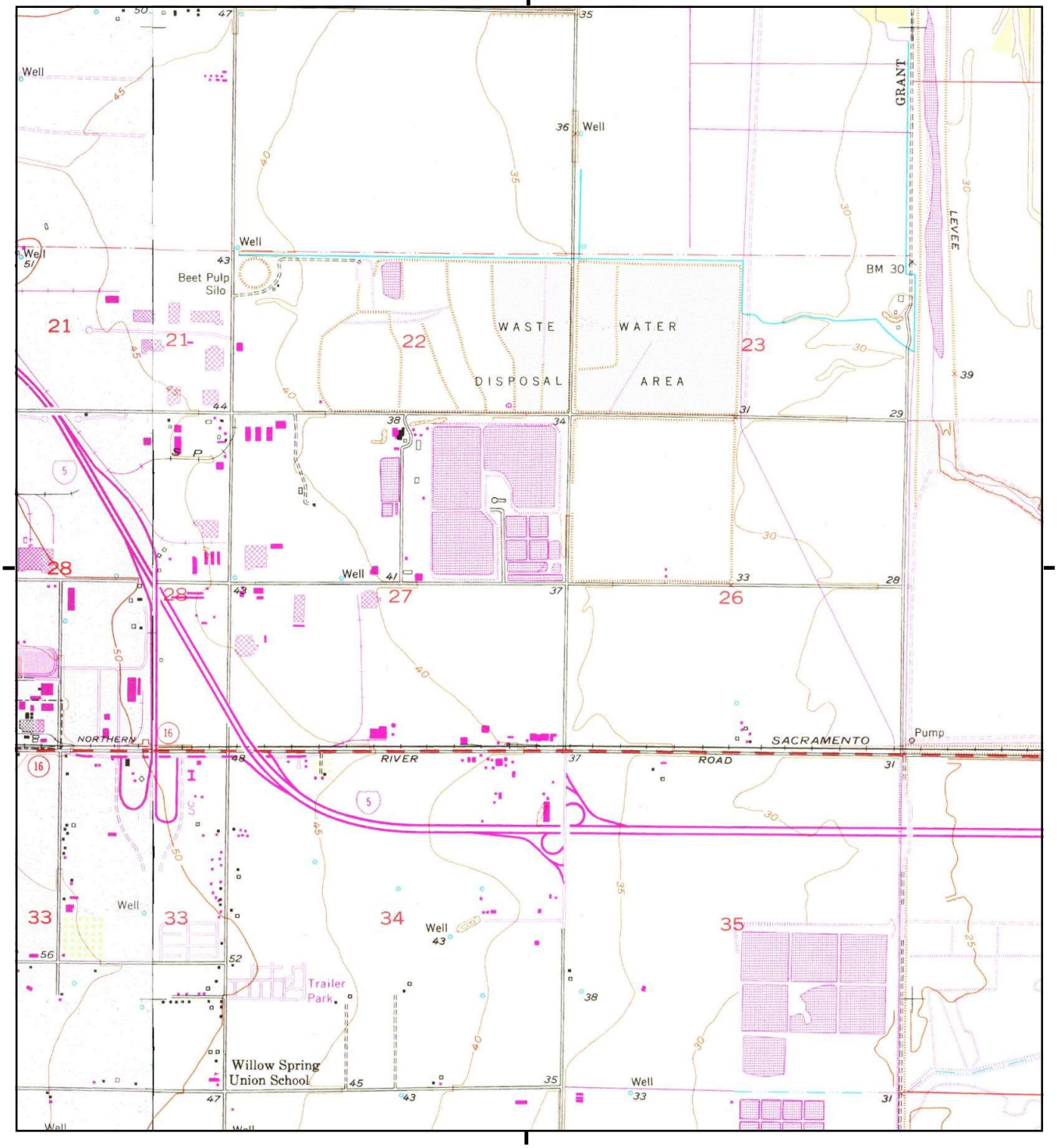
TP, Grays Bend, 2012, 7.5-minute
W, Woodland, 2012, 7.5-minute

SITE NAME: 8-Acre Property
ADDRESS: County Road 102
Woodland, CA 95776
CLIENT: Wallace - Kuhl & Associates

N

Historical Topo Map

1975



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

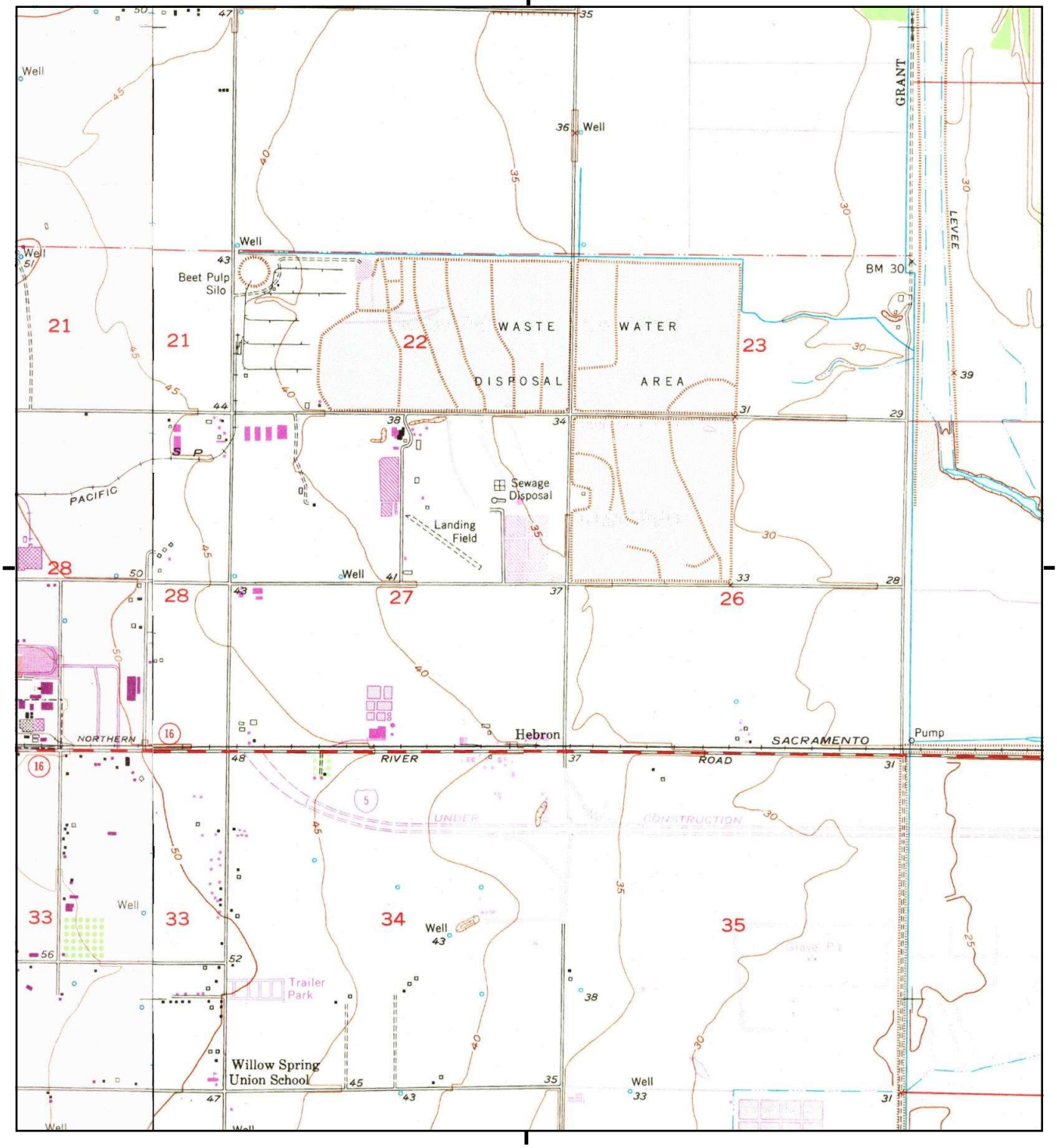
TP, Grays Bend, 1975, 7.5-minute
W, Woodland, 1975, 7.5-minute

SITE NAME: 8-Acre Property
ADDRESS: County Road 102
Woodland, CA 95776
CLIENT: Wallace - Kuhl & Associates

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

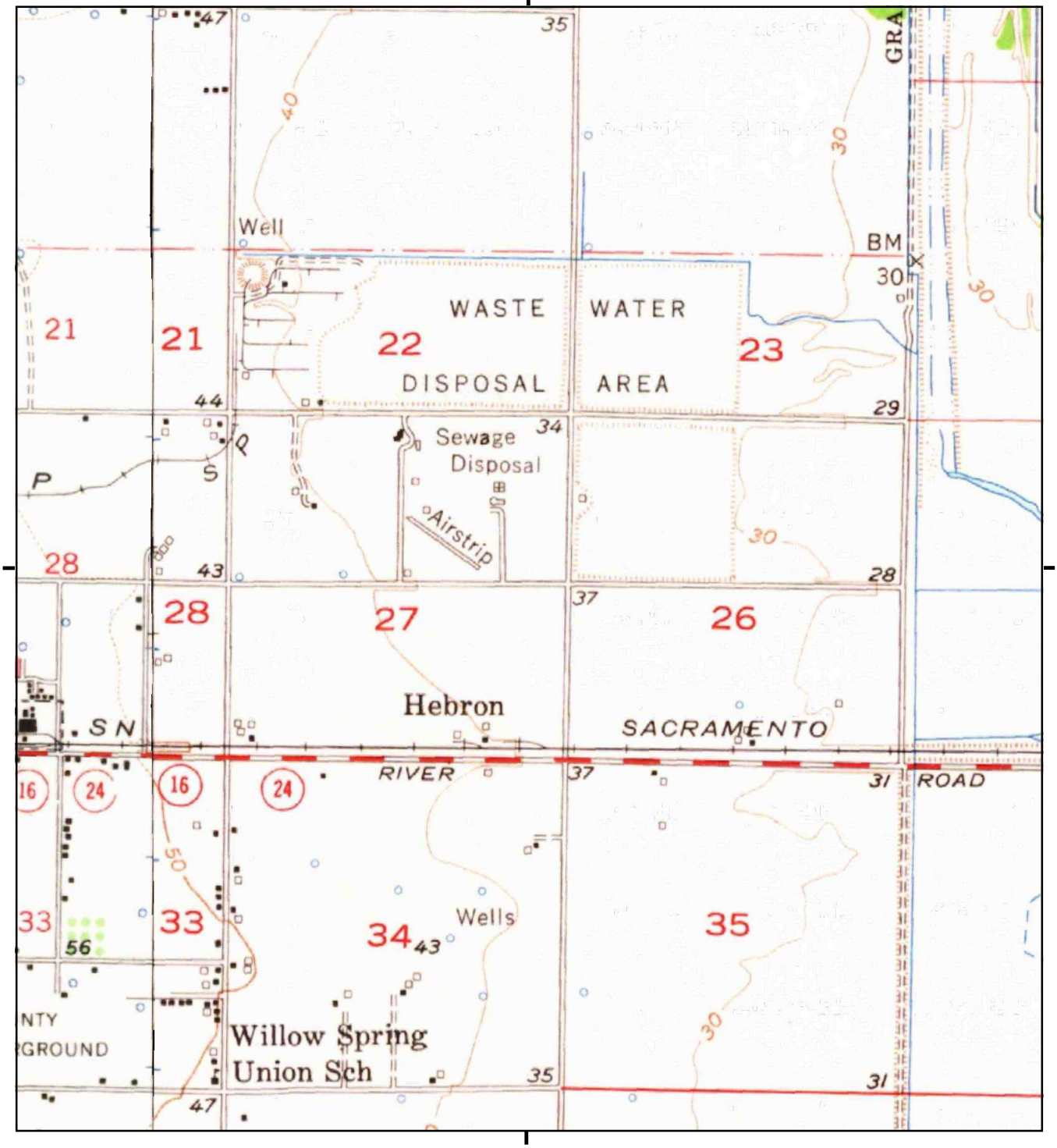
TP, Grays Bend, 1968, 7.5-minute
W, Woodland, 1968, 7.5-minute

SITE NAME: 8-Acre Property
ADDRESS: County Road 102
Woodland, CA 95776
CLIENT: Wallace - Kuhl & Associates

N

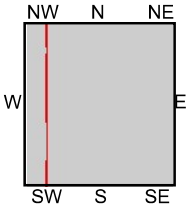
Historical Topo Map

1953, 1954



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



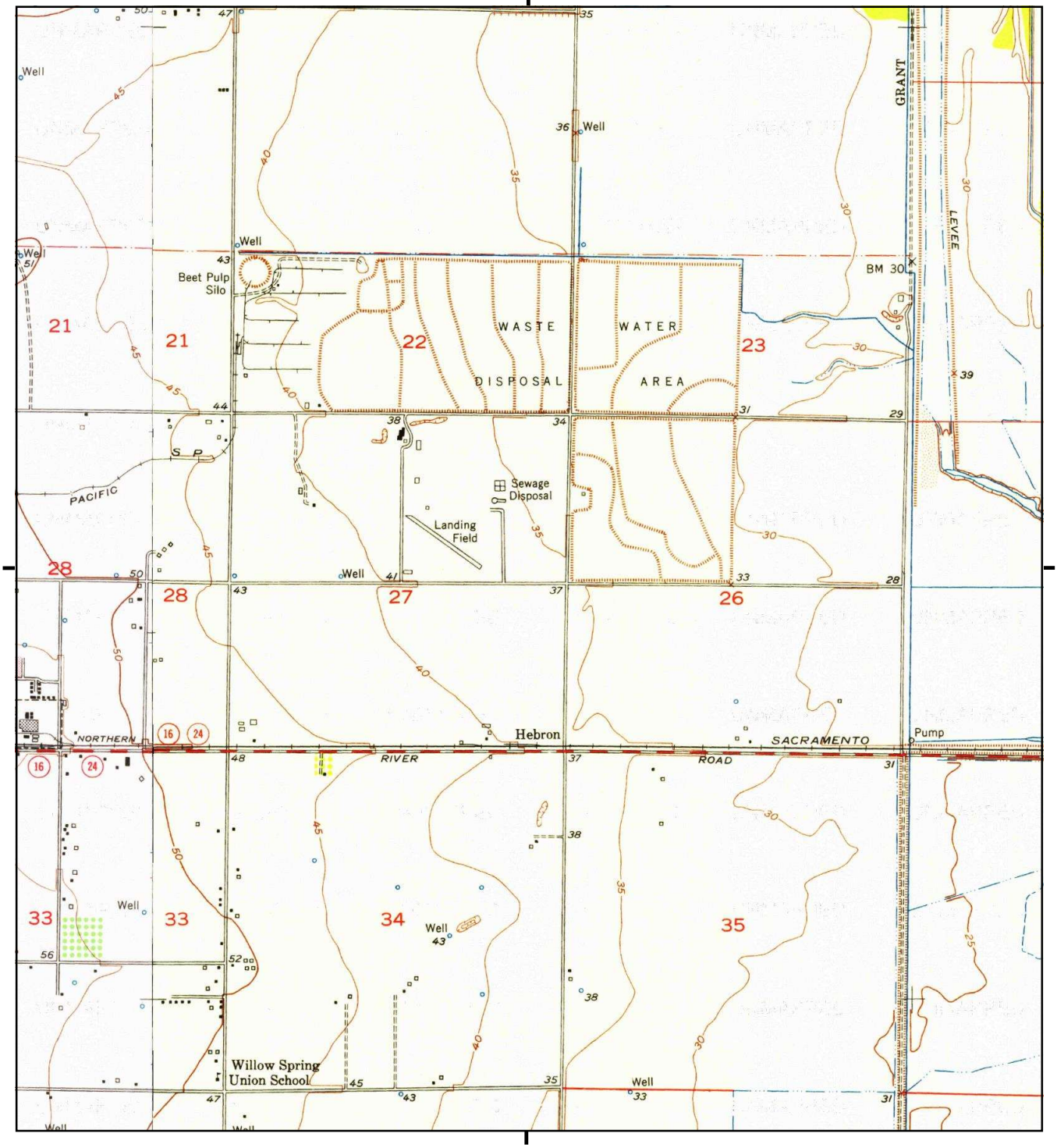
TP, Davis, 1954, 15-minute
SW, Woodland, 1953, 15-minute

SITE NAME: 8-Acre Property
ADDRESS: County Road 102
Woodland, CA 95776
CLIENT: Wallace - Kuhl & Associates

N

Historical Topo Map

1952, 1953



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

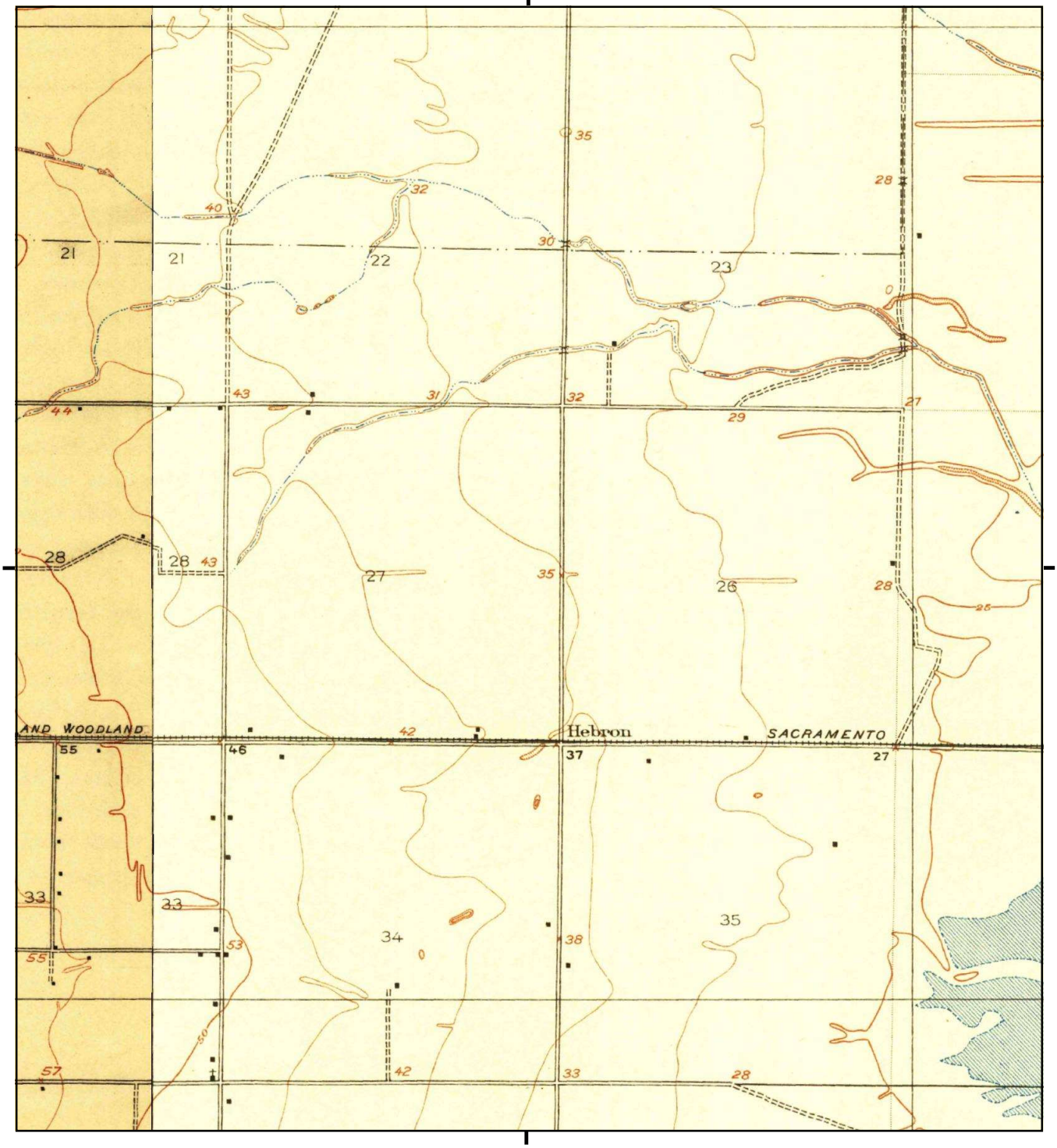
TP, Grays Bend, 1953, 7.5-minute
W, Woodland, 1952, 7.5-minute

SITE NAME: 8-Acre Property
ADDRESS: County Road 102
Woodland, CA 95776
CLIENT: Wallace - Kuhl & Associates

N

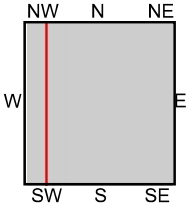
Historical Topo Map

1915, 1916



This report includes information from the following map sheet(s).

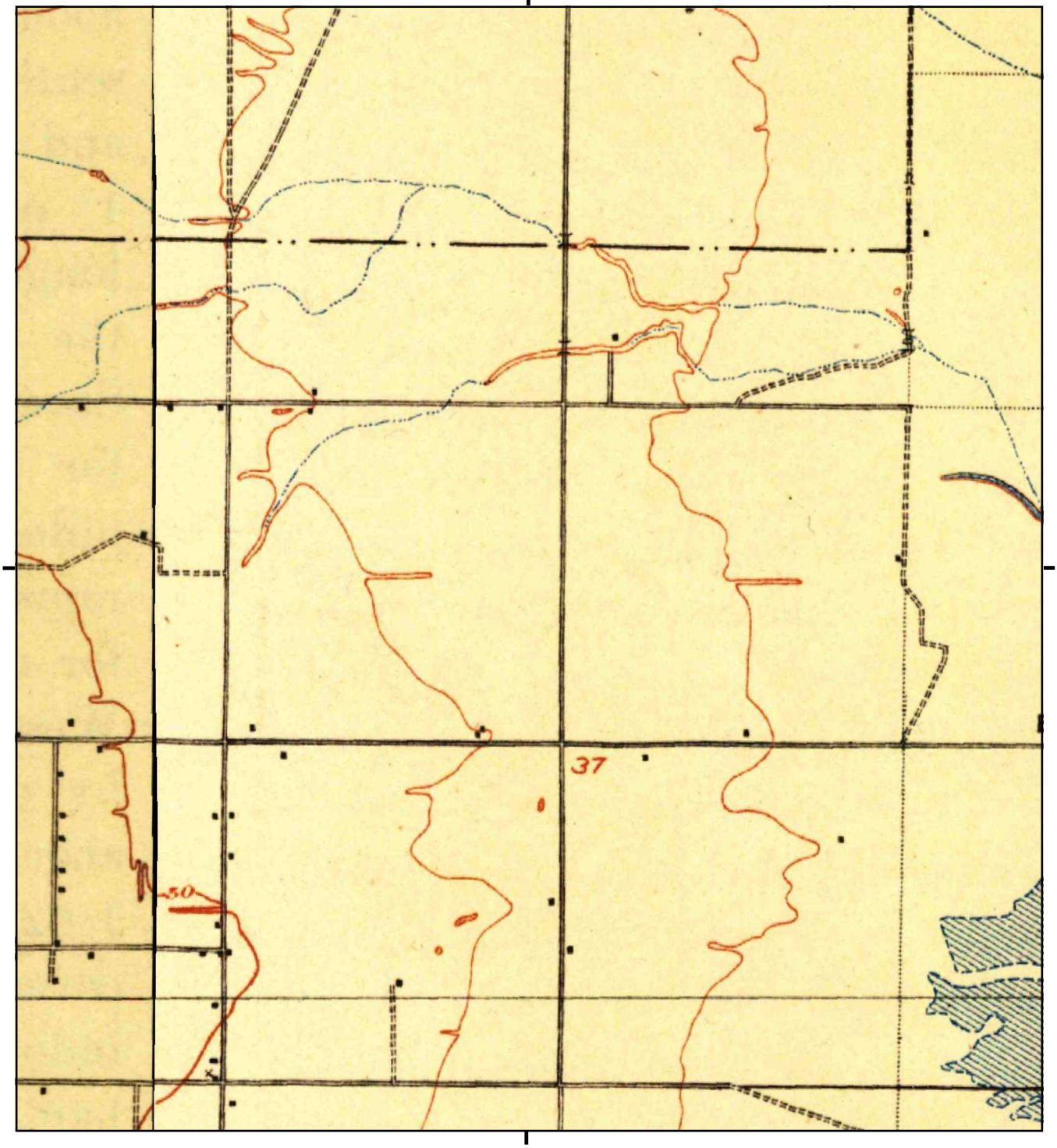
0 Miles 0.25 0.5 1 1.5



TP, Grays Bend, 1916, 7.5-minute
W, Yolo, 1915, 7.5-minute

SITE NAME: 8-Acre Property
ADDRESS: County Road 102
Woodland, CA 95776
CLIENT: Wallace - Kuhl & Associates

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Davisville, 1907, 15-minute
SW, Woodland, 1907, 15-minute

SITE NAME: 8-Acre Property
ADDRESS: County Road 102
Woodland, CA 95776
CLIENT: Wallace - Kuhl & Associates

N

8-Acre Property

County Road 102

Woodland, CA 95776

Inquiry Number: 5508848.8

December 28, 2018

The EDR Aerial Photo Decade Package

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

EDR Aerial Photo Decade Package

12/28/18

Site Name:

8-Acre Property
County Road 102
Woodland, CA 95776
EDR Inquiry # 5508848.8

Client Name:

Wallace - Kuhl & Associates
3050 Industrial Boulevard
West Sacramento, CA 95691
Contact: Nancy Malaret

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:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1993	1"=500'	Acquisition Date: June 16, 1993	USGS/DOQQ
1984	1"=500'	Flight Date: June 29, 1984	USDA
1977	1"=500'	Flight Date: June 23, 1977	USGS
1974	1"=500'	Flight Date: December 11, 1974	USGS
1968	1"=500'	Flight Date: May 28, 1968	USGS
1954	1"=500'	Flight Date: August 03, 1954	USGS
1952	1"=500'	Flight Date: October 22, 1952	USDA
1937	1"=500'	Flight Date: August 26, 1937	USDA

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INQUIRY #: 5508848.8

YEAR: 2016

= 500'

N

EDR


INQUIRY #: 5508848.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 5508848.8
YEAR: 2009
= 500'
N
EDR



INQUIRY #: 5508848.8

YEAR: 2005

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.


INQUIRY #: 5508848.8
YEAR: 1993
= 500'
N
EDR



INQUIRY #: 5508848.8

YEAR: 1984

= 500'

N

EDR



INQUIRY #: 5508848.8

YEAR: 1977

= 500'

N

EDR


INQUIRY #: 5508848.8
YEAR: 1974
= 500'
N
EDR



INQUIRY #: 5508848.8

YEAR: 1968

= 500'

N

EDR


INQUIRY #: 5508848.8
YEAR: 1954
= 500'
N
EDR



INQUIRY #: 5508848.8

YEAR: 1952

= 500'

N

EDR



INQUIRY #: 5508848.8

YEAR: 1937

= 500'

N

EDR

8-Acre Property
County Road 102
Woodland, CA 95776

Inquiry Number: 5508848.5
December 17, 2018

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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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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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☑	EDR Digital Archive
2010	☑	☑	EDR Digital Archive
2005	☑	☑	EDR Digital Archive
2000	☑	☑	EDR Digital Archive
1995	☑	☑	EDR Digital Archive
1992	☑	☑	EDR Digital Archive
1987	☑	☐	POLK DIRECTORY CO
1982	☑	☐	POLK DIRECTORY CO
1977	☑	☐	POLK DIRECTORY CO
1972	☑	☐	POLK DIRECTORY CO
1968	☑	☐	POLK DIRECTORY CO
1963	☑	☐	POLK DIRECTORY CO
1955	☐	☐	POLK DIRECTORY CO

FINDINGS

TARGET PROPERTY STREET

County Road 102
Woodland, CA 95776

Year	CD Image	Source	
COUNTY ROAD 102			
2014	pg A1	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A5	EDR Digital Archive	
2000	pg A7	EDR Digital Archive	
1995	pg A9	EDR Digital Archive	
1992	pg A11	EDR Digital Archive	
1987	-	POLK DIRECTORY CO	Street not listed in Source
1982	-	POLK DIRECTORY CO	Street not listed in Source
1977	-	POLK DIRECTORY CO	Street not listed in Source
1972	-	POLK DIRECTORY CO	Street not listed in Source
1968	-	POLK DIRECTORY CO	Street not listed in Source
1963	-	POLK DIRECTORY CO	Street not listed in Source
1955	-	POLK DIRECTORY CO	Street not listed in Source

FINDINGS

CROSS STREETS

Year	CD Image	Source	
E BEAMER ST			
2014	pg. A2	EDR Digital Archive	
2010	pg. A4	EDR Digital Archive	
2005	pg. A6	EDR Digital Archive	
2000	pg. A8	EDR Digital Archive	
1995	pg. A10	EDR Digital Archive	
1992	pg. A12	EDR Digital Archive	
1955	-	POLK DIRECTORY CO	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COUNTY ROAD 102 2014

450	AM PM MINI MARKET
	TAKHAR B & R INC
10064	JOSE LINARES HANDYMAN
	LINARES, JOSE B
10200	GILBERT, HAROLD
10475	KAREOFELAS, DELORES A
10587	BINGHAM, DAVID R
12972	BAILEY, JAMES
	EARTHSAVERS EROSION CTRL LLC
12980	OCCUPANT UNKNOWN,
	WOODLAND SURPLUS PIPE & STEEL
12991	CASILLAS, JOE M
13330	PAYNE BROTHERS RANCHES
	PAYNE, ROBERT
13435	BELIS, ANGELICA M
	FERNANDEZ, MARIA
14305	CAMPOS, JOSE
	ERNESTINA, TAMAYO
	NAVARRO, TAMAYA E
	PULIDO, JOSE L
	TAMAYO, SAUL
14755	KAUR, HARDEEP
18440	CHANDI INVESTMENT
	QUICK SMOG AND TEST ONLY
	SPARKLES CAR WASH & DETAIL CTR
19241	MOUNTAIN VALLEY GOLF CENTER
19389	METRO AUTO DISMANTLING
20179	OCCUPANT UNKNOWN,
22094	OCCUPANT UNKNOWN,
22200	GARD, DAVID L
22246	BASINGER, AMELIA R
22408	BECERRA, SHANNON K
	THERAPEUTIC RIDING AND OFF-TRA
22438	BLISSETT, MELISSA
22444	FERKOVICH, JAMES W
	SHELLEY & JAMES FERKOVICH
22470	PAIGE INSTRUMENTS
	PAIGE, DAVID
22701	OCCUPANT UNKNOWN,
22705	VALCHECK, WILLIAM V
22773	OCCUPANT UNKNOWN,
22777	AAKEN RSRCH INST A CA PUBLIC
	OCCUPANT UNKNOWN,
22800	DIFUNTORUM, AARON M
22804	OCCUPANT UNKNOWN,
23464	BRINLEY, JOHN K
23740	BLACK CREST FRIESIANS

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E BEAMER ST 2014

1210	GUERRA, BERTHA E
1212	HUTTO, TRAVIS O
1214	MACIAS, OSCAR
1217	LINDSTROMS AUTO BODY
1225	GOOD STUFF STORAGE
	MINI STORE IT
1233	DOUGHERTY BROTHERS
1237	FUTURE SATELLITE COMMUNIC
	J&D DISTRIBUTING
	L A MARKETING
	MAYMAX DISTRIBUTION
	RABAINO ROOFING
	TEAGUE, E
1238	LITTLE BUDDY PRODUCTS CO
	OFFICIAL INSULATION CO INC
1243	SERVPRO OF DAVIS WOODLAND
1244	CULINARY FARMS INC
1310	J & M RECYCLING
1319	NAEKEL JAMES
1324	TJT INC
1350	BRONCO COMMUNITCATIONS
	PACIFIC UTILITY CONSTRUCTION
1380	BENTEC SCIENTIFIC LLC
	COASTAL PVA INCORPORATED
1386	WESTERN GEO ENGINEERS
1431	BILLET TRANSPORTATION INC
1572	STOW IT OF WOODLAND
	U -HAUL CO WOODLAND
1686	MORGAN TRAILER FINANCIAL CORP
	TRUCK ACCESSORIES GROUP LLC
1720	SKYLINE HOMES INC
1755	RITE AID DRUG PALACE INC
1776	PRIME CONDUIT INC
1785	MARZOLF, CURTIS
	WILBUR-ELLIS COMPANY
1805	CHRISP COMPANY
2050	TARGET CORPORATION
2222	E & E CO LTD
	MANAOLANA SPEECH THERAPY LLC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COUNTY ROAD 102 2010

450	AM PM MINI MARKET
	FLEXIBLE MANUFACTURING
	TAKHAR B & R INC
10200	LOPEZ, JERROD
10475	KAREOFELAS, JAMES A
10587	HILL, RUTH A
12972	EARTHSAVERS EROSION CTRL LLC
12980	WOODLAND SURPLUS PIPE & STEEL
13330	CASTLE, THOMAS
	PAYNE FARMS
13435	BELIS, ANGELICA M
	CERVANTES, ANTONIO R
	CERVANTES, MARTHA
	CONTRERAS, BLANCA L
	VERA, VICENTE
14305	CAMPOS, JOSE
14755	BAL, BHAJANJIT S
18440	FIVE RIVERS AUTO SALES INC
	SPARKLES CAR WASH & DETAIL CTR
19241	MOUNTAIN VALLEY GOLF CENTER
19389	METRO AUTO DISMANTLING
20179	OCCUPANT UNKNOWN,
22094	OCCUPANT UNKNOWN,
22200	BULLARD, JR
22246	BASINGER, AMELIA R
22408	JOHNSON, COLIN R
	THERAPEUTIC RIDING AND OFF-TRA
22438	OCCUPANT UNKNOWN,
22444	FERKOVICH, BRIAN J
	SHELLEY & JAMES FERKOVICH
22470	PAIGE INSTRUMENTS
	PAIGE, DAVID F
22705	VALCHECK DAVID ERIC
	VALCHECK, WILLIAM V
22773	OCCUPANT UNKNOWN,
22777	RUSSELL, MICHAEL J
22800	DIFUNTORUM, AARON M
22804	OCCUPANT UNKNOWN,
23464	THOMPSON, JAMES R

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E BEAMER ST 2010

1210	ROBLES, SALVADOR F
1212	DUNCAN, ROBERT H
1214	DARR, REBECCA
1217	LINDSTROMS AUTO BODY
1220	STIREWALT DOUG
1225	GOOD STUFF STORAGE
	MINI STOR IT
1233	KENNAN CORP
1237	GIBSON EXPLORATION LLC
1238	LITTLE BUDDY PRODUCTS CO
	R T INSTRUMENT SERVICES
1242	PATRICK INDUSTRIES INC
1243	SERVPRO OF DAVIS WOODLAND
1244	CULINARY FARMS INC
	DEANS DIP AND DRESSING CO LLC
1310	J & M RECYCLING
1319	NAEKEL JAMES
1324	TJT INC
1350	PACIFIC UTILITY CONSTRUCTION
1351	WOODLAND POLY
1380	BENTEC SCIENTIFIC LLC
	COASTAL PVA INCORPORATED
1386	WESTERN GEO ENGINEERS
1425	GENCO DISTRIBUTION SYSTEM INC
1431	PHILLIPS RH VINEYARD
1572	STOW IT OF WOODLAND
	U -HAUL CO WOODLAND
1686	TRUCK ACCESSORIES GROUP LLC
1720	SKYLINE HOMES INC
1755	RITE AID DRUG PALACE INC
1776	PRIME CONDUIT INC
1785	JOHN TAYLOR FERTILIZERS CO
1805	CHRISP COMPANY
2050	IFCO SYSTEMS
	SAC DC
	TARGET CORPORATION
2222	REMEDYTEMP INC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COUNTY ROAD 102 2005

450	AM PM MINI MARKET
10064	ROBINSON, GARY
10200	GILBERT, HAROLD
10475	KAREOFELAS, JAMES A
10587	HILL, RUTH A
12972	DYCK R H INC
12980	LOGAN, LEONARD T
13330	CASTLE, THOMAS
	PAYNE FARMS
13435	BELIS, ANGELICA
	CERVANTES, ANTONIO R
	CONTRERAS, BLANCA
	DAMIAN, FERMIN
	SALINAS, CESAR V
	VELARDE, JESUS
14305	LOZANO, MOISES
14755	OCCUPANT UNKNOWN,
18430	CARTWRIGHT CHRISTOPHER
	WOODLAND CHEVRON
18530	OCCUPANT UNKNOWN,
19241	MOUNTAIN VALLEY GOLF CENTER
	OCCUPANT UNKNOWN,
19389	METRO AUTO DISMANTLING
	MEYARRCHI INTERNATIONAL INC A
20179	OCCUPANT UNKNOWN,
	WOODLAND DAVIS AEROMODLERS
22200	GARD, DAVID L
22246	BASINGER, AMELIA R
22408	SMITH, RICHARD D
22444	OCCUPANT UNKNOWN,
	SHELLEY & JAMES FERKOVICH
22470	PAIGE INSTRUMENTS
	PAIGE, DAVID F
22701	VIGIL, RUBEN
22705	OCCUPANT UNKNOWN,
	VALCHECK DAVID ERIC
22709	OCCUPANT UNKNOWN,
22777	RUSSELL, MICHAEL J
22800	OCCUPANT UNKNOWN,
22804	OCCUPANT UNKNOWN,
23464	LYN MAR KENNELS
	THOMPSON, JAMES R
23740	KELLEY, CHARLES R

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E BEAMER ST 2005

1210	OCCUPANT UNKNOWN,
1212	DUNCAN, ROBERT H
1214	DARR, REBECCA
1217	LINDSTROMS AUTO BODY
1220	STIREWALT DOUG
1225	MINI STOR-IT
1233	CONSTRN TESTING SERVICES
	SOIL CHEMICAL CORPORATION
1237	BENOIT CLEANING & MAINTENANCE
1238	LITTLE BUDDY PRODUCTS CO
1242	BERGEN HERMAN
	PATRICK INDUSTRIES INC
1243	VALLEY TRANSMISSIONS
1244	DEANS DIP AND DRESSING CO LLC
	MARIES DRESSINGS INC
	ORR FOOD COMPANY
1301	OCCUPANT UNKNOWN,
1310	J & M RECYCLING
	KOLEY JOHN J MACHNRY
1319	NAEKEL JAMES
1324	INSTA OFFICE MFG INC
	TJT INC
1350	KIWANIS INTERNATIONAL INC
	MSI CONSTRUCTION INC
	PACIFIC UTILITY CONSTRUCTION
1380	BENTEC SCIENTIFIC LLC
1386	WESTERN GEO-ENGINEERS
1425	GENCO DISTRIBUTION SYSTEM INC
1431	PHILLIPS RH VINEYARD
1572	STOW IT OF WOODLAND
1686	TRUCK ACCESSORIES GROUP INC
1720	SKYLINE HOMES INC
1755	RITE AID OF CALIFORNIA INC
1776	COMBINED TRANSPORT INC
	LAMSON & SESSIONS CO
1785	STARK JEFFERY
	TAYLOR JOHN FERTILIZERS CO
1805	ZIEMAN MANUFACTURING COMPANY
2050	SAC DC
	TARGET CORPORATION

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COUNTY ROAD 102 2000

12972	SUNLAND HAY EXPORTS INC
13330	PAYNE, ASHLEY
14305	LOZANO, MOISES
	TAMAYO, B
18430	WOODLAND CHEVRON
19241	MOUNTAIN VALLEY GOLF CENTER
22246	BASINGER, TOM
22408	SMITH, RICHARD D
22444	FERKOVICH, JAMES W
22470	PAIGE INSTRUMENTS
	PAIGE, DAVID
22701	TAUZER WILLIAM
	TAUZER, SUSAN E
22709	BALLANTYNE, STACIE A
22777	NICHOLSON, KEVIN C
22804	WITTENBERG, GABRIEL N

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E BEAMER ST 2000

1212	OCCUPANT UNKNOWN,
1214	FRATUS, JOE
1217	LINDSTROMS AUTO BODY
1220	STIREWALT DOUG
1237	BENOIT CLEANING & MAINTENANCE
1238	LITTLE BUDDY PRODUCTS CO
1242	BERGEN HERMAN
1244	MARIES DRESSINGS INC
	MARIES QUALITY FOODS INC
1301	POLAN, BERTRAM J
1310	J & M RECYCLING
	KOLEY JOHN J MACHNRY
1319	CHAMBERLAIN, MICHELE
	NAEKEL JAMES
1324	T J T INC
1350	KIWANIS CLUB OF WOODLAND INC
	PACIFIC UTILITY CONSTRUCTION
1351	PAN OCEAN INC
1380	BENTEC SCIENTIFIC LLC
1386	OCCUPANT UNKNOWN,
	WESTERN GEO-ENGINEERS
1425	GENCO RETURN CENTERS LP
1431	PHILLIPS RH VINEYARD
1572	BROWN, JAMES
1686	TRUCK ACCESSORIES GROUP INC
1720	SKYLINE HOMES INC
1755	THRIFTY PAYLESS INC
1776	COMBINED TRANSPORT INC
	LAMSON & SESSIONS CO THE
1785	TAYLOR JOHN FERTILIZERS CO
	WILBUR-ELLIS COMPANY
1805	ZIEMAN MANUFACTURING COMPANY
2050	TARGET CORPORATION

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COUNTY ROAD 102 1995

10587 HILL RANDY
19389 METRO AUTO DISMANTLING
22470 PAIGE INSTRUMENTS

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E BEAMER ST 1995

1217	LINDSTROMS AUTO BODY
1220	STIREWALT DOUG
1225	MINI STOR-IT
1230	YOLO PALLETS
1237	MCINTYRE, LANCE
	PHOTOGRAPHY BY VALERIE
1238	LANMARK & ASSOCIATES INC
	LITTLE BUDDY PRODUCTS CO
1242	BERGEN HERMAN
1243	PORTON INTERNATIONAL
	VALLEY FUEL INJECTION & TURBO
1244	MARIES DRESSINGS INC
	MARIES QUALITY FOODS INC
1310	KOLEY JOHN J MACHNRY
1324	INSTA-OFFICE MANUFACTURING
	LEG-IT TIRE COMPANY INC
1350	ALL-CO DRAINAGE & BLDG PDTS
1380	J R H BIO SCIENCES INC
1386	WESTERN GEO-ENGINEERS
1431	SUPERIOR TRNSP SYSTEMS
1572	U HAUL CO
1601	DEC THEO
1686	TRUCK ACCESSORIES GROUP INC
1720	SKYLINE CORPORATION
1755	THRIFTY PAYLESS INC
1776	LAMSON & SESSIONS CO THE
1805	ZIEMAN MANUFACTURING COMPANY
2050	DAYTON HUDSON CORPORATION

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COUNTY ROAD 102 1992

18530 JENKS, B
22200 BULLARD, G G
22246 BASINGER, TOM
22470 PAIGE INSTRUMENTS
PAIGE, DAVID
22701 TAUZER, WILLIAM J
22705 PLESSER, STEVEN B
22777 PUCCIO, ELIA

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E BEAMER ST 1992

1228	DOUGS MILLWRIGHT SERVICE
1233	BALLOONS OF WOODLAND
	CAL AG-INDUSTRIAL SUPPLY INC
	DORNBUSH, ROGER
	NAEKEL JIM REALTY
1237	PHOTOGRAPHY BY VALERIE
	STORMONT LABORATORIES INC
1238	LANMARK & ASSOCIATES
1242	BERGEN TIRE COMPANY
1243	AUSTIN ELECTRIC CO
	PORTON INTERNATIONAL
1244	MARIES QUALITY FOODS INC
1310	JOHN J KOLEY MACHINERY
1319	SURRATT, GEORGE S
1324	HECO MANUFACTURING COMPANY
	LEG-IT TIRE COMPANY INC
1350	ALL-CO DRAINAGE & BLDG PDTS
1351	MOBIL OIL CORPORATION
1386	WESTERN GEO-ENGINEERS
1540	UTILITY TRLR SLS OF CENTL CAL
1572	MCGUIRE, R W
1601	WIZARD RACING ROD & CUSTO
1686	LEER INC
1720	SKYLINE CORPORATION
1755	PAY LESS DRUG STORES NORTHWEST
1776	LAMSON & SESSIONS CO THE
1805	ZIEMAN MANUFACTURING COMPANY
2050	DAYTON HUDSON CORPORATION

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1987

BEAMER ST E —FROM EAST EAST ST 5 NORTH OF E MAIN ST

ZIP CODE 95695

1210★Gillespie Patricia A 662-6512
1212 Kuntz Nelda J ◎ 662-7551
1214 No Return
1217 Welltech Inc oil water gas well serv 661-0398
1220 Storage
1224 Lee's Johnny Body & Paint Shop 662-0718
1225 Mini-Stor-It 661-1888
1233 Buildings
SUITES
B Howard Tim Ceramic Tile Inc ceramic tile contr 662-9491
C First American Title Co Of Yolo foreclosures 662-4228
D Pacific Laser Inc sls & serv constn laser equip 661-3223
E Gale Don Construction Co Inc genl contr 666-3113
E1 Balloons Of Woodland hot air balloons 666-6424

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1987

E BEAMER ST—Contd

F1 State Of California Canning Tomato Insp (Sub Ofc) 666-9111
F2 S C C Products pest control sups & equip 666-1020
F2 State Canning Tomato Insp whse ofc 666-4217
G Vacant
DEE JAY WAY INTERSECTS
1237a Reed Rockbit Co oil field serv 666-2119
1237b Sacramento Bee (Circulation Ofc) 662-9745
1237c Texaco Incorporated production ofc 662-8226
1237c-1 Dale's Millwright Service 662-2840
1237d Stormont Laboratories Inc biological 661-3078
1237e County Archives & Records Cntr
1237f Vacant
1237h Vacant
32791 Nor-Cal Wild Rice Inc whol seed co 661-1606
1238 Lanmark & Associates bldg sups 662-5434
1238a Paulson Enterprises wldr shop 661-3224
1238b Vacant
1242 Bergen Tire Co 666-1616
1243a Austin Electric ofc overflow 662-8052
1243b Austin Electric contr 662-8052
1243c J & R Scientific overflow
1243d Golden State Fishing Tools 661-3719
1244 Marie's Quality Foods Inc food prod 662-9638
HARTER AV INTERSECTS
1310 Storage
1319 Stow-It stge 666-0855
Strickland Cecil H 666-0855
1324 Gorman Manufacturing Co Inc machinists 662-0211
Western Geo-Engineers sub ofc
1350 Hernandez Jess
1351 Mobil Chemical Co Plastic Pkg Div polyetheline prod packaging 661-4904
1386 Western Geo-Engineers environmental geology 662-4541
1398 Contadina (Ofc)
MATMOR RD INTERSECTS
1572 Stow-It stge 662-4441
★Splude Gail
RD 101 INTERSECTS
1686 Leer West Inc mfg camper shells 666-0176
1755 Payless Drug Store

24

BEAMER ST W (WESTLAND DIST)—FROM WEST ST WEST 5 NORTH OF MAIN ST

ZIP CODE 95695
1 Walker Allyn W ◎ 662-6756
5 Simmons Lois M Mrs ◎ 662-8065
9 Hubert Wm ◎ 662-5587
13★Delgadillo Juan ◎ 666-0673
17★Ali Mazhar 661-3106
21★Arizaga Mario ◎ 666-0165
25 Chapman Robt C 662-5676
29 Vacant
33 Armstrong Lorraine A ◎ 662-6127
37 Ayon Ecedro ◎ 666-9673
41 Carpenter Cath A Mrs ◎ 662-8116
45 Nash H L ◎ 662-4629
49 No Return
53 Aubuchon Jesse W ◎ 662-6681
57★Carroll Claude
61 Vacant
65 Cagle K Mark ◎ 662-1445
69 Burrious Dave ◎ 661-3158
73 Leland Clarence W ◎ 662-2764
77★Bettencourt Ed
CALIFORNIA ST INTERSECTS
105 Dunning Beverly B ◎ 666-9167
109 Navarrette Ramon V ◎ 662-8844
113 Mitchell Dorothy L Mrs ◎ 661-1732
117 Turold Steve ◎
121 Tompkins Willis S ◎ 666-2881
MARIPOSA ST INTERSECTS
124 Francis Louis D ◎ 662-8182
125 Morales Rueben ◎
128 Shank Arth L ◎ 662-9329

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1982

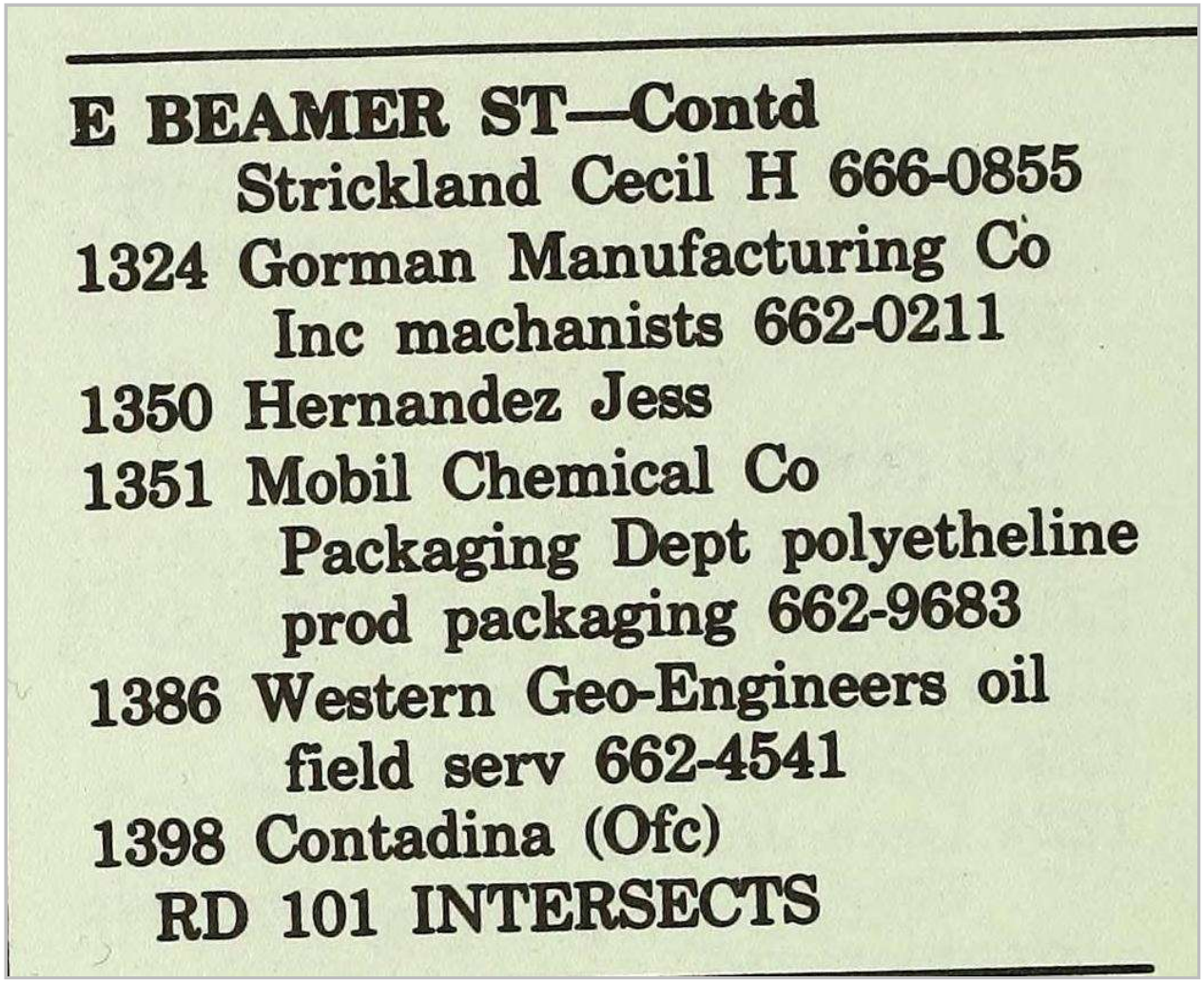
BEAMER ST E —FROM EAST EAST ST 5 NORTH OF E MAIN ST

ZIP CODE 95695

1210 Kitz Kenneth G ◎ 662-5602
1212 Kuntz Nelda J ◎ 662-7551
1214★Hettrick Raquel G 666-5344
1220★Shaw Jerry L 666-0832
1224 Lee's Johnny Body & Paint Shop auto painting 662-0718
BUILDINGS
SUITES
B Souza Doug Lettering & Screen Printing 666-6387
C Acorn Equipment whse & prod equip sls & serv 666-5572
D Fitzgerald Hazlip Construction Inc 666-2141
F1 State Of California Canning Tomato Insp (Sub Ofc)
F2 Kirkpatrick & Associates concrete patching 666-4126
1233a Complete Filter Service sls & serv air filters 662-4526
1233e E O C O Incorporated herbs 666-9888
1233g Vacant
1237a Reed Rockbit Co 666-2119
1237c Texaco Incorporated production ofc 662-8226
1237c-1 Dale's Millwright (Ofc) 662-2840
1237d Under Constn
1238 Conco Building Supplies 662-5434
1238a Delta Industrial Communications & Eng 662-3276
1238b Creative Coach Conversion (Whse)
1242 Sea Nymph Boats 666-1708
1243a Superior A G Parts 666-3621
1243b Austin Electric electrical contr 662-8052
1243c Austin Electric (Stge)
1243d Hughes Tool Co 662-7903
1244 Marie's Quality Dressing Inc food prod 662-9638
1310 Storage
1319 Stow-It stge 666-0855

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1982



E BEAMER ST—Contd

Strickland Cecil H 666-0855

1324 Gorman Manufacturing Co Inc machanists 662-0211

1350 Hernandez Jess

1351 Mobil Chemical Co Packaging Dept polyetheline prod packaging 662-9683

1386 Western Geo-Engineers oil field serv 662-4541

1398 Contadina (Ofc)

RD 101 INTERSECTS

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1977

BEAMER ST E —FROM EAST EAST ST 5 NORTH OF E MAIN ST

ZIP CODE 95695

1210 Kuntz Philipp ◎ 662-7724
1212 Kuntz Lorenz P ◎ 662-7551
1214★Matta Linda
1220 Marie's Quality Dressing (Whse) 662-9638
1224 Lee's Body & Paint Shop auto painting 662-0718
1238 Helena Chemical Co Inc agri prods 662-1709
1238a Delta Industrial Communications & Eng 662-3276
1238b Conco Building Sups 662-5434
1242 Sea Nymph Boats 666-1708
1244 Marie's Quality Dressing Inc food prod 662-9638
1324 Gorman Manufacturing Co Inc machanists 662-0211
1350★Hernandez Jess
Rear Vacant
1351 Mobil Chemical Co Packaging Dept polyetheline prod packaging 662-9683
1386 Wilson Christopher C ◎ 662-0479
1398 Watson P C 662-6387

MATMOR RD INTERSECTS

1686 Vacant

RD 101 INTERSECTS

1700 Stow It Storage Facilities 662-4441

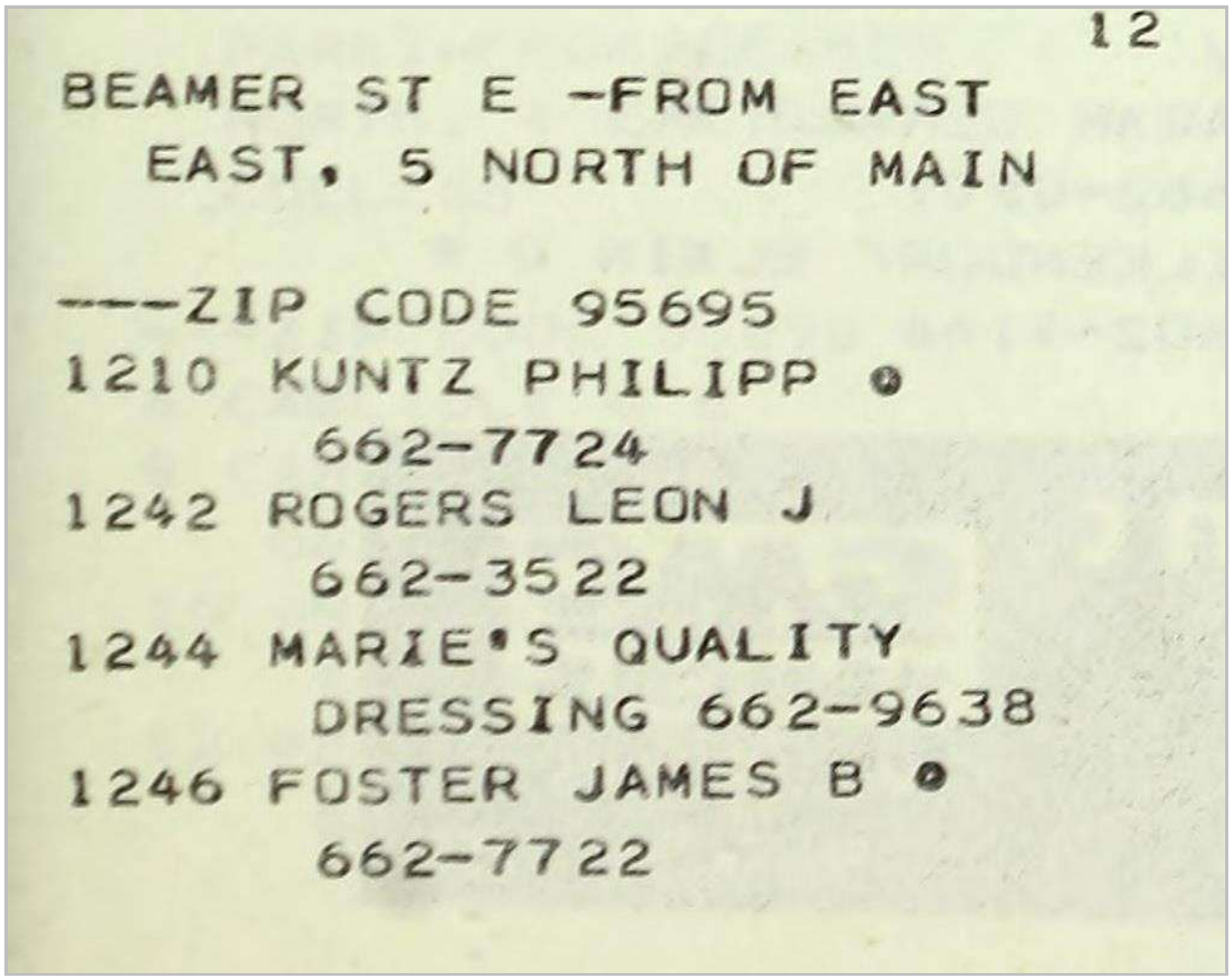
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1972

1210 Kuntz Philipp ◎ 662-7724
1212 Kuntz Lorenz P ◎ 662-7551
1214 ★ Evara Gloria
1216 Valdivia David 662-1622
1220 Marie's Quality Dressing (Whse)
1224 Lee's Body & Paint Shop auto painting
1238 L B Industries mobile home parts 666-2103
1242 L B Industries (Stge)
1244 Marie's Quality Dressing Inc food prod 662-9638
1324 Gorman Manufacturing Co machanists 662-0211
1350 Silva Antonio A ◎ 662-3088
Rear Leiholt Emil
1355 Mobil Chemical Co (Kordite Packaging Dept) polyetheline prod packaging 662-9683
1386 Watterson W Henry ◎ 662-6140
1398 ★ Mc Cormick W James 662-0391
MATMOR RD INTERSECTS
1686 Skyline Corp mobile homes distr & mfr 662-9315
RD 101 INTERSECTS

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1968



12

BEAMER ST E -FROM EAST
EAST, 5 NORTH OF MAIN

---ZIP CODE 95695
1210 KUNTZ PHILIPP ●
662-7724
1242 ROGERS LEON J
662-3522
1244 MARIE'S QUALITY
DRESSING 662-9638
1246 FOSTER JAMES B ●
662-7722

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1968

1324 GORMAN MANUFACTURING
& SUPPLY MACH
662-0211
1350 VALDIVIA DAVID G
662-4632
SILVA TONY 662-3088
1351 MOBIL CHEMICAL CO
(KORDITE PACKING
DEPT) POLYETHELINE
PROD 662-5466
1386 WATTERSON W HENRY ●
662-6140
1398 POOLE BRYCE A
662-2266
———MATMOR RD INTERSECTS

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

E BEAMER ST 1963

BEAMER EAST — From East
east 5 north of Main

1244 Marcie's Quality Dressing Inc 2-4013
Foster Jas B ◎ bait dlrs 2-7722
Gorman Mfg Co 662-1130
Hightower Roy E
Korite Co bag mfrs 2-5466
Kuntz Lorenzo 2-7551
Kuntz Philipp ◎ 2-5936
Lee's Auto Body & Paint Shop 662-1422
McNally Gene
Patchett's Bus & Trans 2-4047
Peggy's Kitchen restr 2-6014
Reische Electrical Supply Co 662-1130
Rogers Leon J 662-3522
Silva Tony 2-3088

Matmor rd intersects
sw cor Hartmann Bros Farm Enterprise Inc trucking 2-8658

APPENDIX D

EDR® Radius Map Report with Geocheck

East Beamer Housing Project Property
East Beamer Street
Woodland, CA 95776

Inquiry Number: 6067018.2s
May 18, 2020

The EDR Radius Map™ Report

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

FORM-LBF-DLU

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Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	59
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

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

EAST BEAMER STREET
WOODLAND, CA 95776

COORDINATES

Latitude (North):	38.6850000 - 38° 41' 6.00"
Longitude (West):	121.7306000 - 121° 43' 50.16"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	610410.1
UTM Y (Meters):	4282379.0
Elevation:	38 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5619718 GRAYS BEND, CA
Version Date:	2012
West Map:	5619764 WOODLAND, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140725, 20140621
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
EAST BEAMER STREET
WOODLAND, CA 95776

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CHRISP COMPANY	1805 E BEAMER ST	AST, CERS HAZ WASTE, CERS TANKS, HAZNET, CERS,...	Higher	499, 0.095, NNW
A2	ZIEMAN MANUFACTURING	1805 E BEAMER RD	RCRA-SQG, HIST UST, FINDS, ECHO, CERS	Higher	499, 0.095, NNW
A3	ZIEMAN MANUFACTURING	1805 E BEAMER ST	UST	Higher	499, 0.095, NNW
A4	ZIEMAN MANUFACTURING	1805 E BEAMER ST	HAZNET, HWTS	Higher	499, 0.095, NNW
5	ADAMS GRAIN	17900 CR 102	UST	Higher	1623, 0.307, SSE
6	WILBUR-ELLIS COMPANY	1785 E BEAMER ST	UST	Higher	1839, 0.348, West
7	ALFOREX SEEDS LLC (C	41970 E MAIN ST	UST	Higher	2472, 0.468, South
B8	WILBUR ELLIS	1962 HAYS LN	RESPONSE, ENVIROSTOR	Higher	3549, 0.672, South
B9	WILBUR ELLIS	1962 HAYS LN	HIST Cal-Sites, CERS	Higher	3549, 0.672, South

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-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List

US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST ..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC ..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing
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 Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
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
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

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators / No Longer Regulated
FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
US MINES ..... Mines Master Index File
ABANDONED MINES ..... Abandoned Mines

FINDS Facility Index System/Facility Registry System
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
ICE ICE
HIST CORTESE Hazardous Waste & Substance Site List
HWP EnviroStor Permitted Facilities Listing
HWT Registered Hazardous Waste Transporter Database
MINES Mines Site Location Listing
MWMP Medical Waste Management Program Listing
NPDES NPDES Permits Listing
PEST LIC Pesticide Regulation Licenses Listing
PROC Certified Processors Database
Notify 65 Proposition 65 Records
UIC UIC Listing
UIC GEO UIC GEO (GEOTRACKER)
WASTEWATER PITS Oil Wastewater Pits Listing
WDS Waste Discharge System
WIP Well Investigation Program Case List
MILITARY PRIV SITES MILITARY PRIV SITES (GEOTRACKER)
PROJECT PROJECT (GEOTRACKER)
WDR Waste Discharge Requirements Listing
CIWQS California Integrated Water Quality System
CERS CERS
NON-CASE INFO NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ Well Stimulation Project (GEOTRACKER)
HWTS Hazardous Waste Tracking System
MINES MRDS Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historical Auto Stations
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

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

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

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/16/2019 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ZIEMAN MANUFACTURING	***1805 E BEAMER RD***	***NNW 0 - 1/8 (0.095 mi.)***	***A2***	***40***
EPA ID:: CAD981686629				

State- and tribal - equivalent NPL

RESPONSE: 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.

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

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WILBUR ELLIS	***1962 HAYS LN***	***S 1/2 - 1 (0.672 mi.)***	***B8***	***55***
Database: RESPONSE, Date of Government Version: 01/27/2020				
Status: Certified				
Facility Id: 57280026				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/27/2020 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WILBUR ELLIS Facility Id: 57280026 Status: Certified	***1962 HAYS LN***	***S 1/2 - 1 (0.672 mi.)***	***B8***	***55***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 4 UST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ZIEMAN MANUFACTURING Database: YOLO CO. UST, Date of Government Version: 12/12/2019 Current Status: 02 Facility Id: FA0000451	1805 E BEAMER ST	NNW 0 - 1/8 (0.095 mi.)	A3	44
ADAMS GRAIN Database: YOLO CO. UST, Date of Government Version: 12/12/2019 Current Status: 02 Facility Id: FA0000005	17900 CR 102	SSE 1/4 - 1/2 (0.307 mi.)	5	52
WILBUR-ELLIS COMPANY Database: YOLO CO. UST, Date of Government Version: 12/12/2019 Current Status: 02 Facility Id: FA0000543	1785 E BEAMER ST	W 1/4 - 1/2 (0.348 mi.)	6	53
ALFOREX SEEDS LLC (C Database: YOLO CO. UST, Date of Government Version: 12/12/2019 Current Status: 02 Facility Id: FA0000076	41970 E MAIN ST	S 1/4 - 1/2 (0.468 mi.)	7	54

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WILBUR ELLIS	*1962 HAYS LN*	*S 1/2 - 1 (0.672 mi.)*	*B9*	*57*

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/21/2020 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHRISP COMPANY	*1805 E BEAMER ST*	*NNW 0 - 1/8 (0.095 mi.)*	*A1*	*8*

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ZIEMAN MANUFACTURING Facility Id: 00000006765	*1805 E BEAMER RD*	*NNW 0 - 1/8 (0.095 mi.)*	*A2*	*40*

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.

A review of the CERS TANKS list, as provided by EDR, and dated 01/21/2020 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHRISP COMPANY	*1805 E BEAMER ST*	*NNW 0 - 1/8 (0.095 mi.)*	*A1*	*8*

Other Ascertainable Records

HAZNET: 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 from non-California manifests & continuation sheets are not included at the present time. 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, & disposal method. The source is the Department of Toxic Substance Control is the agency. This database begins with calendar year 1993.

A review of the HAZNET list, as provided by EDR, and dated 12/31/2017 has revealed that there are 2 HAZNET sites within approximately 0.25 miles of the target property.

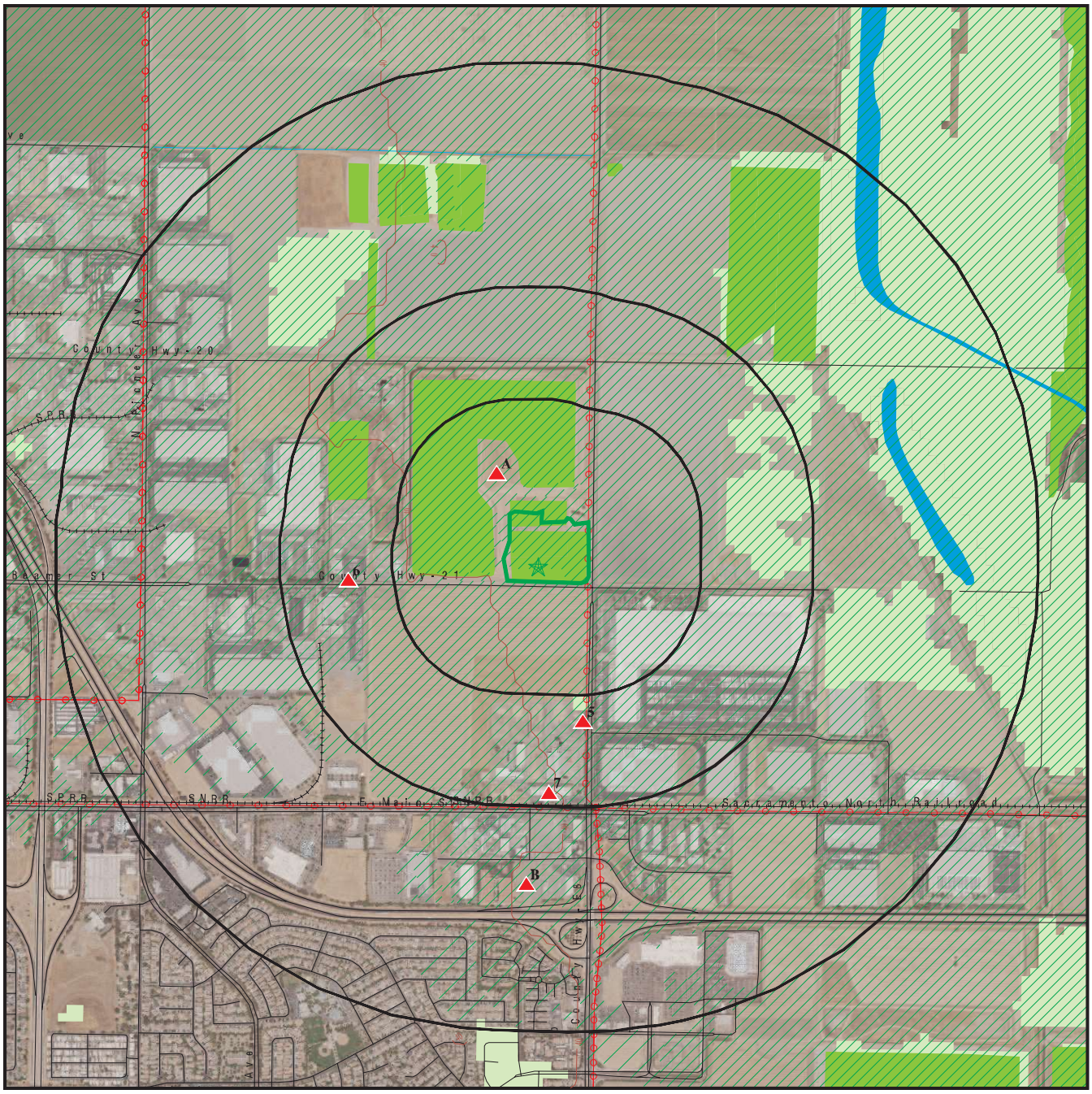
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHRISP COMPANY GEPAID: CAL000333878	***1805 E BEAMER ST***	***NNW 0 - 1/8 (0.095 mi.)***	***A1***	***8***
ZIEMAN MANUFACTURING GEPAID: CAD981686629	***1805 E BEAMER ST***	***NNW 0 - 1/8 (0.095 mi.)***	***A4***	***44***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
	CDL

OVERVIEW MAP - 6067018.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/4 1/2 1 Miles

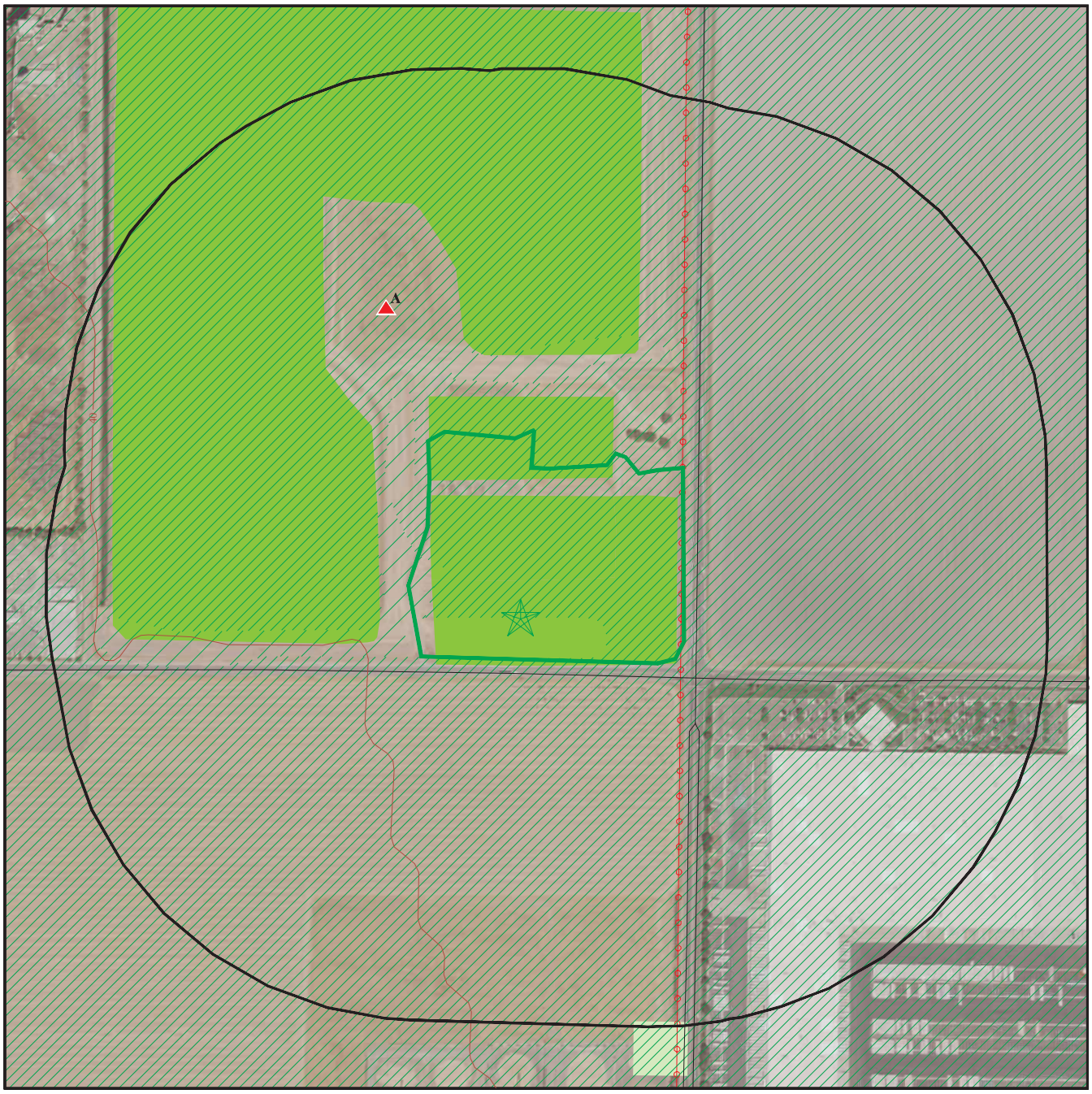
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

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:	East Beamer Housing Project Property	CLIENT:	Wallace - Kuhl & Associates
ADDRESS:	East Beamer Street Woodland CA 95776	CONTACT:	Nancy Malaret
LAT/LONG:	38.685 / 121.7306	INQUIRY #:	6067018.2s
		DATE:	May 18, 2020 3:14 pm

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DETAIL MAP - 6067018.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

N

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

SITE NAME:	East Beamer Housing Project Property	CLIENT:	Wallace - Kuhl & Associates
ADDRESS:	East Beamer Street Woodland CA 95776	CONTACT:	Nancy Malaret
LAT/LONG:	38.685 / 121.7306	INQUIRY #:	6067018.2s
		DATE:	May 18, 2020 3:16 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	1.000		0	0	0	0	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.250		0	0	NR	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	0	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	1	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.500		1	0	3	NR	NR	4
AST	TP		NR	NR	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	TP		NR	NR	NR	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	1	NR	1
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		1	0	NR	NR	NR	1
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		1	0	NR	NR	NR	1
CERS TANKS	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	TP		NR	NR	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	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
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0

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
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	0.250		2	0	NR	NR	NR	2
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.250		0	0	NR	NR	NR	0
EDR Hist Cleaner	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.500		0	0	0	NR	NR	0
RGA LUST	0.500		0	0	0	NR	NR	0
- Totals --		0	7	0	3	3	0	13

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **CHRISP COMPANY** **AST** **S113153074**
NNW **1805 E BEAMER ST** **CERS HAZ WASTE** **N/A**
< 1/8 **WOODLAND, CA 95776** **CERS TANKS**
0.095 mi. **HAZNET**
499 ft. **Site 1 of 4 in cluster A** **CERS**
HWTS

Relative:
Higher

Actual:
39 ft.

AST:

Name:	CHRISP COMPANY
Address:	1805 E BEAMER ST
City/Zip:	WOODLAND,95776
Certified Unified Program Agencies:	Not reported
Owner:	CHRISP ROBERT
Total Gallons:	Not reported
CERSID:	10215550
Facility ID:	Not reported
Business Name:	CHRISP COMPANY
Phone:	(530) 406-2220
Fax:	(530) 406-2221
Mailing Address:	1805 E BEAMER STREET
Mailing Address City:	WOODLAND
Mailing Address State:	CA
Mailing Address Zip Code:	95776
Operator Name:	Joseph Fini
Operator Phone:	(530) 406-2220
Owner Phone:	(510) 656-2840
Owner Mail Address:	43650 OSGOOD ROAD
Owner State:	CA
Owner Zip Code:	94539
Owner Country:	United States
Property Owner Name:	Robert Chrisp
Property Owner Phone:	510-656-2840
Property Owner Mailing Address:	43650 Osgood Rd
Property Owner City:	Fremont
Property Owner Stat :	CA
Property Owner Zip Code:	94539
Property Owner Country:	United States
EPAID:	CAL000333878

CERS HAZ WASTE:

Name:	CHRISP COMPANY
Address:	1805 E BEAMER ST
City,State,Zip:	WOODLAND, CA 95776
Site ID:	18888
CERS ID:	10215550
CERS Description:	Hazardous Waste Generator

CERS TANKS:

Name:	CHRISP COMPANY
Address:	1805 E BEAMER ST
City,State,Zip:	WOODLAND, CA 95776
Site ID:	18888
CERS ID:	10215550
CERS Description:	Aboveground Petroleum Storage

HAZNET:

Name:	CHRISP COMPANY
Address:	1805 E BEAMER ST

CHRISP COMPANY (Continued) **S113153074**

Address 2:	Not reported
City,State,Zip:	WOODLAND, CA 957766220
Contact:	WILLIAM BUCKMAN
Telephone:	5109333940
Mailing Name:	Not reported
Mailing Address:	PO BOX 1368
Year:	2017
Gepaid:	CAL000333878
TSD EPA ID:	NED981723513
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Tons:	0.6
Year:	2017
Gepaid:	CAL000333878
TSD EPA ID:	CAD980675276
CA Waste Code:	291 - Latex waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	2.35
Year:	2016
Gepaid:	CAL000333878
TSD EPA ID:	CAD980675276
CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.2
Year:	2016
Gepaid:	CAL000333878
TSD EPA ID:	CAD059494310
CA Waste Code:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.025
Year:	2016
Gepaid:	CAL000333878
TSD EPA ID:	CAD059494310
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.225
Year:	2016
Gepaid:	CAL000333878
TSD EPA ID:	ARD981057870
CA Waste Code:	291 - Latex waste
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	1.14675
Year:	2016
Gepaid:	CAL000333878
TSD EPA ID:	CAD980675276
CA Waste Code:	291 - Latex waste

CHRISP COMPANY (Continued) **S113153074**

Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.8
Year:	2016
Gepaid:	CAL000333878
TSD EPA ID:	ARD981057870
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.35
Year:	2015
Gepaid:	CAL000333878
TSD EPA ID:	CAD059494310
CA Waste Code:	-
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	3.75
Year:	2015
Gepaid:	CAL000333878
TSD EPA ID:	CAD980675276
CA Waste Code:	291 - Latex waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.5

Click this hyperlink while viewing on your computer to access
15 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:

Year:	2012
Gen EPA ID:	CAL000333878
Shipment Date:	20120302
Creation Date:	4/17/2012 20:30:11
Receipt Date:	20120305
Manifest ID:	008642442JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.417
Waste Quantity:	100
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

CHRISP COMPANY (Continued) **S113153074**

Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2017
Gen EPA ID:	CAL000333878
Shipment Date:	20170523
Creation Date:	10/11/2018 18:31:48
Receipt Date:	20170609
Manifest ID:	006014587SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MOD095038998
Trans 2 Name:	TSMT
TSDF EPA ID:	NED981723513
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES IN
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.4
Waste Quantity:	800
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20170331
Creation Date:	5/11/2018 18:34:02
Receipt Date:	20170415
Manifest ID:	005976660SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MOD095038998
Trans 2 Name:	TSMT
TSDF EPA ID:	NED981723513
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES IN
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.6
Waste Quantity:	1200
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20170331
Creation Date:	5/9/2018 18:31:38

CHRISP COMPANY (Continued) **S113153074**

Receipt Date:	20170406
Manifest ID:	005976661SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
TSDF EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS OF BUTTONWILLOW
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	2.35
Waste Quantity:	4700
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2014
Gen EPA ID:	CAL000333878
Shipment Date:	20141219
Creation Date:	3/19/2015 22:14:50
Receipt Date:	20150102
Manifest ID:	004688804SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	352 - Other organic solids
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.125
Waste Quantity:	250
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141103
Creation Date:	3/27/2015 22:15:05
Receipt Date:	20141111
Manifest ID:	004423926SKS
Trans EPA ID:	TXR000081205

CHRISP COMPANY (Continued) **S113153074**

Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.4
Waste Quantity:	800
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141103
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141107
Manifest ID:	004423928SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.4
Waste Quantity:	800
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20140908
Creation Date:	12/18/2014 22:14:48
Receipt Date:	20140916
Manifest ID:	004549511SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported

CHRISP COMPANY (Continued) **S113153074**

CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.225
Waste Quantity:	450
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140620
Creation Date:	11/13/2014 22:15:04
Receipt Date:	20140703
Manifest ID:	004380459SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MOR000501973
Trans 2 Name:	R&R TRUCKING
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	491 - Unspecified sludge waste
RCRA Code:	Not reported
Disposal Method:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.125
Waste Quantity:	250
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140520
Creation Date:	8/14/2014 22:15:24
Receipt Date:	20140528
Manifest ID:	004287705SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	Not reported

CHRISP COMPANY (Continued) **S113153074**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140520
Creation Date:	8/12/2014 22:15:10
Receipt Date:	20140528
Manifest ID:	004287704SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20140520
Creation Date:	8/12/2014 22:15:10
Receipt Date:	20140528
Manifest ID:	004287704SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F001
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.225
Waste Quantity:	450
Quantity Unit:	P
Additional Code 1:	D040
Additional Code 2:	D039
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140327
Creation Date:	7/1/2014 22:15:08

CHRISP COMPANY (Continued) **S113153074**

Receipt Date:	20140409
Manifest ID:	004246134SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.675
Waste Quantity:	1350
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2010
Gen EPA ID:	CAL000333878
Shipment Date:	20100916
Creation Date:	12/3/2010 18:30:57
Receipt Date:	20100920
Manifest ID:	006660003JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	1.668
Waste Quantity:	400
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100610
Creation Date:	8/26/2010 18:30:32
Receipt Date:	20100614
Manifest ID:	002389451JJK
Trans EPA ID:	CAD982413262

CHRISP COMPANY (Continued) **S113153074**

Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	2.2935
Waste Quantity:	550
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100218
Creation Date:	11/30/2010 18:30:29
Receipt Date:	20100227
Manifest ID:	003216953FLE
Trans EPA ID:	CAR000179382
Trans Name:	ENV ENVIRONMENTAL INTERNATIONAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	331 - Off-specification, aged, or surplus organics
RCRA Code:	F003
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.9075
Waste Quantity:	275
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000333878
Shipment Date:	20151025
Creation Date:	5/4/2016 22:15:36
Receipt Date:	20151031
Manifest ID:	008932408FLE
Trans EPA ID:	ALR000007237
Trans Name:	ACTION RESOURCES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	ARD981057870

CHRISP COMPANY (Continued) **S113153074**

Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	2.5
Waste Quantity:	5000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151019
Creation Date:	1/21/2016 22:15:39
Receipt Date:	20151023
Manifest ID:	005110003SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	352 - Other organic solids
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.095
Waste Quantity:	190
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150805
Creation Date:	11/3/2015 22:15:24
Receipt Date:	20150813
Manifest ID:	005036285SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.3

CHRISP COMPANY (Continued) **S113153074**

Waste Quantity:	600
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20150803
Creation Date:	10/6/2015 22:15:06
Receipt Date:	20150810
Manifest ID:	005036175SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	352 - Other organic solids
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150629
Creation Date:	10/1/2015 22:15:12
Receipt Date:	20150706
Manifest ID:	005015539SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	331 - Off-specification, aged, or surplus organics
RCRA Code:	U154
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	5
Waste Quantity:	10000
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CHRISP COMPANY (Continued) **S113153074**

Shipment Date:	20150529
Creation Date:	8/31/2015 22:15:49
Receipt Date:	20150609
Manifest ID:	004824941SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150529
Creation Date:	8/20/2015 22:15:33
Receipt Date:	20150604
Manifest ID:	004824942SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported

Shipment Date:	20150424
Creation Date:	7/8/2015 22:15:29
Receipt Date:	20150430
Manifest ID:	004825029SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported

CHRISP COMPANY (Continued) **S113153074**

Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	- Not reported
RCRA Code:	U154
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	3.75
Waste Quantity:	7500
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150306
Creation Date:	7/6/2015 22:15:12
Receipt Date:	20150312
Manifest ID:	004761128SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported

Additional Info:

Year:	2011
Gen EPA ID:	CAL000333878
Shipment Date:	20111003
Creation Date:	12/13/2011 18:30:13
Receipt Date:	20111010
Manifest ID:	008642136JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC

CHRISP COMPANY (Continued) **S113153074**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.834
Waste Quantity:	200
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110608
Creation Date:	7/23/2011 18:30:32
Receipt Date:	20110609
Manifest ID:	003777792JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982446874
Trans Name:	EVERGREEN OIL INC - DAVIS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	2.7105
Waste Quantity:	650
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110331
Creation Date:	5/27/2011 18:30:22
Receipt Date:	20110404
Manifest ID:	006660334JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	1.14675

CHRISP COMPANY (Continued) **S113153074**

Waste Quantity:	275
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110121
Creation Date:	3/30/2011 18:30:08
Receipt Date:	20110124
Manifest ID:	004909303JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	2.502
Waste Quantity:	600
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2016
Gen EPA ID:	CAL000333878
Shipment Date:	20151025
Creation Date:	5/4/2016 22:15:36
Receipt Date:	20151031
Manifest ID:	008932408FLE
Trans EPA ID:	ALR000007237
Trans Name:	ACTION RESOURCES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	2.5
Waste Quantity:	5000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

CHRISP COMPANY (Continued) **S113153074**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151019
Creation Date:	1/21/2016 22:15:39
Receipt Date:	20151023
Manifest ID:	005110003SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	352 - Other organic solids
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.095
Waste Quantity:	190
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150805
Creation Date:	11/3/2015 22:15:24
Receipt Date:	20150813
Manifest ID:	005036285SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.3
Waste Quantity:	600
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20150803
Creation Date:	10/6/2015 22:15:06
Receipt Date:	20150810

CHRISP COMPANY (Continued) **S113153074**

Manifest ID:	005036175SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	352 - Other organic solids
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150629
Creation Date:	10/1/2015 22:15:12
Receipt Date:	20150706
Manifest ID:	005015539SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	331 - Off-specification, aged, or surplus organics
RCRA Code:	U154
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	5
Waste Quantity:	10000
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150529
Creation Date:	8/31/2015 22:15:49
Receipt Date:	20150609
Manifest ID:	004824941SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC

CHRISP COMPANY (Continued) **S113153074**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150529
Creation Date:	8/20/2015 22:15:33
Receipt Date:	20150604
Manifest ID:	004824942SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20150424
Creation Date:	7/8/2015 22:15:29
Receipt Date:	20150430
Manifest ID:	004825029SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	- Not reported
RCRA Code:	U154
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	3.75

CHRISP COMPANY (Continued) **S113153074**

Waste Quantity:	7500
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150306
Creation Date:	7/6/2015 22:15:12
Receipt Date:	20150312
Manifest ID:	004761128SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	343 - Unspecified organic liquid mixture
RCRA Code:	F005
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	D001
Additional Code 5:	Not reported

Additional Info:

Year:	2013
Gen EPA ID:	CAL000333878
Shipment Date:	20131202
Creation Date:	3/2/2014 22:15:16
Receipt Date:	20131204
Manifest ID:	003957622SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.75
Waste Quantity:	1500
Quantity Unit:	P
Additional Code 1:	Not reported

CHRISP COMPANY (Continued) **S113153074**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130905
Creation Date:	10/25/2013 22:15:29
Receipt Date:	20130909
Manifest ID:	010832628JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130425
Creation Date:	6/27/2013 22:15:06
Receipt Date:	20130429
Manifest ID:	007036318JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.22935
Waste Quantity:	55
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130416
Creation Date:	8/12/2013 22:15:22

CHRISP COMPANY (Continued) **S113153074**

Receipt Date:	20130422
Manifest ID:	007036331JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	291 - Latex waste
RCRA Code:	Not reported
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.9174
Waste Quantity:	220
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	CHRISP COMPANY
Address:	1805 E BEAMER ST
City,State,Zip:	WOODLAND, CA 95776
Site ID:	18888
CERS ID:	10215550
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	10-27-2015
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 inspections of tank supports/foundation, deterioration, discharges and/or accumulations of oil inside diked areas, and comparison records in the records of inspections (or customary business records).
Violation Notes:	Returned to compliance on 01/18/2016.
Violation Division:	Yolo County Environmental Health
Violation Program:	APSA
Violation Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	10-27-2015
Citation:	40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description:	Failure to inspect hazardous waste storage areas at least weekly.
Violation Notes:	Returned to compliance on 12/15/2015.
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS

CHRISP COMPANY (Continued) **S113153074**

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 10/03/2018. HSC 6.95 25507(a)(1)(A); 19 CCR 4 2729.1(a). OBSERVATION: The owner/operator failed to implement the Employee Training Plan of the Hazardous Materials Business Plan (HMBP) when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 pounds/200 cubic feet. Correction required. CORRECTIVE ACTION: Begin the documented HMBP Employee Training Plan based on the contents of the Employee Training Plan found in the Contingency Plan section of the HMBP.
Violation Division:	Yolo County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description:	Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
Violation Notes:	Returned to compliance on 10/03/2018. 22 CCR 12 66262.34(d)(2); 40 CFR 1 265.173 OBSERVATION: There is one 55-gallon drum containing hazardous waste used coolant without a closed lid. The Generator failed to properly close hazardous waste containers when not in active use. All hazardous waste containers shall be closed at all times except when adding or removing waste. This is a repeat violation from 10-27-15 and therefore a Class II Violation. Correction required. CORRECTIVE ACTION: Close these containers and ensure all hazardous waste containers are closed when not adding or removing waste. Submit verification of compliance to the CUPA within 30 days.
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	22 CCR 23 66273.34 - California Code of Regulations, Title 22, Chapter 23, Section(s) 66273.34
Violation Description:	Failure to label or mark each individual or container or the designated area of universal waste as required. 1) Waste batteries shall be marked with "Universal Waste-Battery(ies)G . 2) Mercury containing equipment shall be marked with "Universal Waste -Mercury-Containing EquipmentG . 3) Lamps shall be marked with G Universal Waste-Lamp(s)G . 4)Each electronic devices or the container or the designated area shall be marked with G Universal

CHRISP COMPANY (Continued) **S113153074**

	Waste-Electronic Device(s)G . 5) Each CRTs or the container or the designated area shall be marked with "Universal Waste-CRT(s)G . 6) CRT glass or the designated area shall be marked with G Universal Waste-CRT glassG .
Violation Notes:	Returned to compliance on 10/03/2018. 22 CCR 23 66273.34 OBSERVATION: There were three 55-gallon drums containing universal waste aerosol cans that were not labeled. Correction required. CORRECTIVE ACTION: The Universal Waste Handler shall label the waste containers as "Universal Waste Aerosol Cans" with an accumulation start date (or be able to demonstrate the accumulation time another way) and ensure that all universal wastes are labeled with the required information. Submit verification of compliance to the CUPA within 30 days.
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
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 maintain a complete copy of the SPCC Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended.
Violation Notes:	Returned to compliance on 09/13/2018. HSC 6.67 25270.4.5(a); 40 CFR 112.3(e)(1). OBSERVATION: The owner/operator failed to maintain SPCC plan onsite (applies if facility is manned at least four (4) hours per day). This was corrected during the time of the inspection. CORRECTIVE ACTION: Maintain SPCC plan onsite (If facility staffed at least 4 hrs/day).
Violation Division:	Yolo County Environmental Health
Violation Program:	APSA
Violation Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31
Violation Description:	Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
Violation Notes:	Returned to compliance on 10/03/2018. 22 CCR 12 66262.34(d)(2); 40 CFR 1 265.31 OBSERVATION: The 55-gallon drum containing hazardous waste used coolant with the accumulation start date of 07-05-14 had a coolant soaked rag sitting in a pool of liquid coolant lying on top of the drum. Also, the pump for the Ursa Super Plus EC SAE 15w-40 was leaking. The oil was dripping from the pump, running down the side of the tank, and staining the cement floor beneath and around the tank.The Generator failed to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment. Correction required. CORRECTIVE ACTION: The Generator shall clean up the top of the drum and dispose

CHRISP COMPANY (Continued) **S113153074**

of the materials properly. The leaky pump shall be repaired. Owner/Operator shall to the [Truncated]

Violation Division: Yolo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 18888
Site Name: CHRISP COMPANY
Violation Date: 09-13-2018
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes: Returned to compliance on 10/03/2018. 22 CCR 16 66266.130 OBSERVATION: There were two 55-gallon drums containing used filters without a label. The Generator failed to properly handle, manage, label, and/or recycle used oil and fuel filters. Correction required. CORRECTIVE ACTION: The Generator shall label drums used to accumulate used oil and/or fuel filters with metal housings as "Drained Used Oil and Fuel Filters" with an accumulation start date. The facility can then accumulate filters in that container up to one-year before disposing of the filters. Submit verification of compliance to the CUPA within 30 days.
Violation Division: Yolo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 18888
Site Name: CHRISP COMPANY
Violation Date: 09-13-2018
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 prepare a Spill Prevention, Control, and Countermeasures (SPCC) Plan.
Violation Notes: Returned to compliance on 09/25/2018. HSC 6.67 25270.4.5(a); 40 CFR 112.3. OBSERVATION: The SPCC Plan was not being implemented. The SPCC Plan was not on site at the beginning of the inspection, the plan was not signed and dated, and the documented monthly inspections were not occurring. The owner/operator failed to prepare and implement a Spill Prevention Control and Countermeasure (SPCC) Plan. The failure to conduct the documented APSA inspections is a repeat violation from 10-27-15. Correction required. CORRECTIVE ACTION: Submit documentation to the CUPA within 30 days demonstrating that you have begun to implement the SPCC Plan.
Violation Division: Yolo County Environmental Health
Violation Program: APSA
Violation Source: CERS

Site ID: 18888
Site Name: CHRISP COMPANY
Violation Date: 10-27-2015
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

CHRISP COMPANY (Continued) **S113153074**

Violation Notes:	Returned to compliance on 12/11/2015.
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 10/03/2018. 22 CCR 12 66262.34(f) OBSERVATION: There were three 55-gallon drums containing ST-101 Thermoplastic Clear Primer hazardous waste that were not labeled appropriately. The Generator failed to properly label hazardous waste accumulation containers with the following requirements: the words "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. This is a repeat violation from 10-27-15 and therefore a Class II violation. Correction required. CORRECTIVE ACTION: The Generator shall label these containers and ensure that all hazardous waste containers are marked with all the required information. Submit verification of compliance to the CUPA within 30 days.
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	10-27-2015
Citation:	HSC 6.5 25189.5(a) - California Health and Safety Code, Chapter 6.5, Section(s) 25189.5(a)
Violation Description:	Failure to properly dispose of hazardous waste at an authorized location.
Violation Notes:	Returned to compliance on 12/15/2015.
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description:	Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount

CHRISP COMPANY (Continued) **S113153074**

	greater than one kilogram for more than 90 days.
Violation Notes:	Returned to compliance on 10/03/2018. 22 CCR 12 66262.34(d) OBSERVATION: There is one 55-gallon drum containing hazardous waste used coolant with an accumulation start date of 11-24-16, and another with 07-26-14, which are beyond the 180-day accumulation time limit. The drum labeled with 07-26-14 was cited as a labeling violation during the 10-27-15 inspection. The Generator, who generates less than 1000 kilogram but more than 100 kilograms per month failed to dispose of hazardous waste within 180 days (or 270 if waste is transported over 200 miles). Facilities who generate less than 1000 kg of hazardous waste per month and do not exceed 6000 kg of waste stored on site at any time may store waste on site up to 180 days. Correction required. CORRECTIVE ACTION: The Generator shall contact a licensed hazardous waste hauler to dispose of this waste under manifest and submit a copy of the manifest to the CUPA within 30 days. [Truncated]
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	10-27-2015
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 12/11/2015.
Violation Division:	Yolo County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description:	Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.
Violation Notes:	Returned to compliance on 10/03/2018. 22 CCR 12 66262.40(a) OBSERVATION: There was one manifest not signed by the designated facility: 005256266 dated 03-08-16. The Generator failed to maintain copies of hazardous waste disposal records on site. [whichever year(s)] Hazardous waste generators shall retain copies of all manifests signed off by the disposal facility and all receipts used in a consolidated manifesting procedure on site for three years and have them readily available for review. Correction required. CORRECTIVE ACTION: Locate a copy of all manifests and receipts for the last three years, maintain them on site, and submit copies to the CUPA within 30 days.
Violation Division:	Yolo County Environmental Health
Violation Program:	HW
Violation Source:	CERS

CHRISP COMPANY (Continued) **S113153074**

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	10-27-2015
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 promptly correct the causes of leaks that result in accumulations of oil in diked areas.
Violation Notes:	Returned to compliance on 01/18/2016.
Violation Division:	Yolo County Environmental Health
Violation Program:	APSA
Violation Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	10-27-2015
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 provide training regarding: 1. The operation and maintenance of equipment to prevent discharges. 2. Discharge procedure protocols. 3. Applicable pollution control laws, rules, and regulations. 4. General facility operations. AND 5. The contents of the SPCC Plan.
Violation Notes:	Returned to compliance on 01/18/2016.
Violation Division:	Yolo County Environmental Health
Violation Program:	APSA
Violation Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Violation Date:	09-13-2018
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 10/03/2018. HSC 6.95 25505(a)(1), 25506, 25508(a)(1) OBSERVATION: There were eight 55-gallon drums containing ST-101 Thermoplastic Black Primer and approximately three pallets of five-gallon cans of solvent based traffic stripe paint that have not been reported. Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities. This is a repeat violation from 12-03-09 and 10-27-15 and therefore a Class II Violation. Correction required. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all reportable quantities of hazardous materials electronically in the California Environmental Reporting System (CERS) within 30 days. [Truncated]
Violation Division:	Yolo County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-13-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency

CHRISP COMPANY (Continued) **S113153074**

Eval Notes:	Not reported
Eval Division:	Yolo County Environmental Health
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-13-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Yolo County Environmental Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-13-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Violations are required to be corrected and documentation describing actions to correct each one forwarded to Yolo County Environmental Health (YCEH) within 30-days.
Eval Division:	Yolo County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-27-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Yolo County Environmental Health
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-27-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Yolo County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-27-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Yolo County Environmental Health
Eval Program:	HW
Eval Source:	CERS

Enforcement Action:

Site ID:	18888
Site Name:	CHRISP COMPANY
Site Address:	1805 E BEAMER ST
Site City:	WOODLAND

CHRISP COMPANY (Continued) **S113153074**

Site Zip:	95776
Enf Action Date:	09-13-2018
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:	Yolo County Environmental Health
Enf Action Program:	APSA
Enf Action Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Site Address:	1805 E BEAMER ST
Site City:	WOODLAND
Site Zip:	95776
Enf Action Date:	09-13-2018
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:	Yolo County Environmental Health
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Site Address:	1805 E BEAMER ST
Site City:	WOODLAND
Site Zip:	95776
Enf Action Date:	09-13-2018
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:	Yolo County Environmental Health
Enf Action Program:	HW
Enf Action Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Site Address:	1805 E BEAMER ST
Site City:	WOODLAND
Site Zip:	95776
Enf Action Date:	10-27-2015
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:	Yolo County Environmental Health
Enf Action Program:	APSA
Enf Action Source:	CERS

Site ID:	18888
Site Name:	CHRISP COMPANY
Site Address:	1805 E BEAMER ST
Site City:	WOODLAND
Site Zip:	95776
Enf Action Date:	10-27-2015
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

CHRISP COMPANY (Continued) **S113153074**

Enf Action Division:	Yolo County Environmental Health
Enf Action Program:	HMRRP
Enf Action Source:	CERS
Site ID:	18888
Site Name:	CHRISP COMPANY
Site Address:	1805 E BEAMER ST
Site City:	WOODLAND
Site Zip:	95776
Enf Action Date:	10-27-2015
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:	Yolo County Environmental Health
Enf Action Program:	HW
Enf Action Source:	CERS

Coordinates:

Site ID:	18888
Facility Name:	CHRISP COMPANY
Env Int Type Code:	HWG
Program ID:	10215550
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	38.688090
Longitude:	-121.732310

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1805 E BEAMER STREET
Affiliation City:	WOODLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95776-6220
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	William Buckman
Entity Title:	Not reported
Affiliation Address:	43650 OSGOOD ROAD
Affiliation City:	FREMONT
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94538-5631
Affiliation Phone:	Not reported
Affiliation Type Desc:	Property Owner
Entity Name:	Robert Chrisp
Entity Title:	Not reported
Affiliation Address:	43650 Osgood Rd
Affiliation City:	Fremont
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94539-5631

CHRISP COMPANY (Continued) **S113153074**

Affiliation Phone:	(510) 933-3914
Affiliation Type Desc:	CUPA District
Entity Name:	YOLO COUNTY
Entity Title:	Not reported
Affiliation Address:	292 West Beamer Street
Affiliation City:	Woodland
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95695
Affiliation Phone:	(530) 666-8646
Affiliation Type Desc:	Document Preparer
Entity Name:	William Buckman
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:	Operator
Entity Name:	Mark Chrisp
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:	(530) 383-5042
Affiliation Type Desc:	Identification Signer
Entity Name:	MARK CHRISP
Entity Title:	BRANCH 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:	Legal Owner
Entity Name:	CHRISP ROBERT
Entity Title:	Not reported
Affiliation Address:	43650 OSGOOD ROAD
Affiliation City:	FREMONT
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94539-5631
Affiliation Phone:	(510) 933-3914
Affiliation Type Desc:	Parent Corporation
Entity Name:	Chrisp Company
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported

CHRISP COMPANY (Continued) **S113153074**

Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

HWTS:
Name: CHRISP COMPANY
Address: 1805 E BEAMER ST
Address 2: Not reported
City,State,Zip: WOODLAND, CA 957766220
EPA ID: CAL000333878
Inactive Date: Not reported
Create Date: 06/20/2008
Last Act Date: 09/24/2019
Mailing Name: WILLIAM BUCKMAN
Mailing Address: 43650 OSGOOD RD
Mailing Address 2: Not reported
Mailing City,State,Zip: FREMONT, CA 94539
Owner Name: CHRISP COMPANY
Owner Address: 43650 OSGOOD RD
Owner Address 2: Not reported
Owner City,State,Zip: FREMONT, CA 945395631
Contact Name: WILLIAM BUCKMAN
Contact Address: 43650 OSGOOD RD
Contact Address 2: Not reported
City,State,Zip: FREMONT, CA 94539

NAICS:
EPA ID: CAL000333878
Create Date: 2008-06-20 10:14:19
NAICS Code: 23411
NAICS Description: Highway and Street Construction
Issued EPA ID Date: 2008-06-20 10:14:18
Inactive Date: Not reported
Facility Name: CHRISP COMPANY
Facility Address: 1805 E BEAMER ST
Facility Address 2: Not reported
Facility City: WOODLAND
Facility County: 57
Facility State: CA
Facility Zip: 957766220

A2 **ZIEMAN MANUFACTURING** **RCRA-SQG** **1000295536**
NNW **1805 E BEAMER RD** **HIST UST** **CAD981686629**
< 1/8 **WOODLAND, CA 95695** **FINDS**
0.095 mi. **ECHO**
499 ft. **Site 2 of 4 in cluster A** **CERS**

Relative:
Higher

Actual:
39 ft.

RCRA-SQG:
Date form received by agency: 1986-10-27 00:00:00.0
Facility name: ZIEMAN MANUFACTURING
Facility address: 1805 E BEAMER RD
WOODLAND, CA 95695
EPA ID: CAD981686629
Mailing address: RT SECOND BOX 252
WOODLAND, CA 95695

ZIEMAN MANUFACTURING (Continued) **1000295536**

Contact:	ENVIRONMENTAL MANAGER
Contact address:	1805 E BEAMER RD WOODLAND, CA 95695
Contact country:	US
Contact telephone:	916-666-0383
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	COMPS CO
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
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):	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

ZIEMAN MANUFACTURING (Continued) **1000295536**

Used oil transporter: No

Violation Status: No violations found

HIST UST:
Name: ZIEMAN MFG CO
Address: 1805 E BEAMER RD
City,State,Zip: WOODLAND, CA 95695
File Number: 0002D4C8
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002D4C8.pdf
Region: STATE
Facility ID: 00000006765
Facility Type: Other
Other Type: STEEL FABRICATORS
Contact Name: THOMAS HAWKES
Telephone: 9166660383
Owner Name: ZIEMAN CORPORATION
Owner Address: 7909 S. PAINTER AVE.
Owner City,St,Zip: WHITTIER, CA 90607
Total Tanks: 0001

Tank Num: 001
Container Num: ZT 1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

FINDS:
Registry ID: 110055754054
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110055754054

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER
Registry ID: 110002752753
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110002752753

Environmental Interest/Information System:
AIR EMISSIONS CLASSIFICATION UNKNOWN
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are

ZIEMAN MANUFACTURING (Continued) **1000295536**

transported off-site.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000295536
Registry ID:	110055754054
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110055754054
Name:	CHRISP COMPANY
Address:	1805 E BEAMER ST
City,State,Zip:	WOODLAND, CA 95776

Envid:	1000295536
Registry ID:	110002752753
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002752753
Name:	ZIEMAN MANUFACTURING COMPANY
Address:	1805 E BEAMER RD
City,State,Zip:	WOODLAND, CA 95776

CERS:

Name:	ZIEMAN MANUFACTURING COMPANY
Address:	1805 E BEAMER RD
City,State,Zip:	WOODLAND, CA 95776-6220
Site ID:	506125
CERS ID:	110002752753
CERS Description:	US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	ENVIR MGMT
Entity Title:	Not reported
Affiliation Address:	1805 E BEAMER ROAD
Affiliation City:	WOODLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Public Contact
Entity Name:	MIKE ARNOLD
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

A3 **ZIEMAN MANUFACTURING CO INC #103** **UST** **U003895296**
NNW **1805 E BEAMER ST** **N/A**
< 1/8 **WOODLAND, CA 95695**
0.095 mi.
499 ft. **Site 3 of 4 in cluster A**

Relative: **Higher**
Actual: **39 ft.**

YOLO CO. UST:

Name:	ZIEMAN MANUFACTURING CO INC #103
Address:	1805 E BEAMER ST
City,State,Zip:	WOODLAND, CA 95695
Facility Id:	FA0000451
Owner Id:	OW0000360
Owner Name:	ZIEMAN MANUFACTURING CO INC
Owner Address:	7907 PAINTER
Owner City/State/Zip:	WHITTIER, CA 90607
Billing Name:	ZIEMAN MANUFACTURING CO INC #103
Billing Address1:	1805 E BEAMER STREET
Billing City/State/Zip:	WOODLAND, CA 95776
Contact Name:	Not reported
Contact Phone:	Not reported
Current Status:	Inactive, non-billable
Program Element:	Not reported
Business Code:	09 - UNKNOWN
Business Type:	6 - OTHER
Tank Number:	1
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported
Product Type:	Regular Unleaded
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	Not reported
INVGEN:	000451

A4 **ZIEMAN MANUFACTURING** **HAZNET** **S123614210**
NNW **1805 E BEAMER ST** **HWTS** **N/A**
< 1/8 **WOODLAND, CA 95776**
0.095 mi.
499 ft. **Site 4 of 4 in cluster A**

Relative: **Higher**
Actual: **39 ft.**

HAZNET:

Name:	ZIEMAN MANUFACTURING
Address:	1805 E BEAMER ST
Address 2:	Not reported
City,State,Zip:	WOODLAND, CA 957766220
Contact:	JOE REYES / GENERAL MANAGER
Telephone:	5306660383
Mailing Name:	Not reported
Mailing Address:	1805 E BEAMER ST
Year:	2008
Gepaid:	CAD981686629
TSD EPA ID:	ARD981057870
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.6
Year:	2007

ZIEMAN MANUFACTURING (Continued) **S123614210**

Gepaid:	CAD981686629
TSD EPA ID:	ARD981057870
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.374
Year:	2006
Gepaid:	CAD981686629
TSD EPA ID:	ARD981057870
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.792
Year:	1999
Gepaid:	CAD981686629
TSD EPA ID:	AZD980892731
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	-
Tons:	0.54
Year:	1997
Gepaid:	CAD981686629
TSD EPA ID:	CAD089446710
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H01 - Transfer Station
Tons:	1.332
Year:	1996
Gepaid:	CAD981686629
TSD EPA ID:	CAD044429835
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	R01 - Recycler
Tons:	1.386
Year:	1996
Gepaid:	CAD981686629
TSD EPA ID:	CAD008364432
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	R01 - Recycler
Tons:	1.206
Year:	1995
Gepaid:	CAD981686629
TSD EPA ID:	CAD044429835
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	R01 - Recycler
Tons:	2.574
Year:	1994
Gepaid:	CAD981686629
TSD EPA ID:	CAD059494310
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	-
Tons:	0
Year:	1994
Gepaid:	CAD981686629

ZIEMAN MANUFACTURING (Continued) **S123614210**

TSD EPA ID: CAD044429835
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: -
Tons: 3.564

Click this hyperlink while viewing on your computer to access
4 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:
Year: 2008
Gen EPA ID: CAD981686629

Shipment Date: 20080110
Creation Date: 8/6/2008 18:30:08
Receipt Date: 20080209
Manifest ID: 000534344FLE
Trans EPA ID: OHD042311209
Trans Name: ASHLAND INC
Trans 2 EPA ID: KS0000336891
Trans 2 Name: SAVANNAH TRANSPORT INC
TSDF EPA ID: ARD981057870
Trans Name: RINECO CHEMICAL INDUSTRIES INC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
CA Waste Code: 343 - Unspecified organic liquid mixture
RCRA Code: D001
Disposal Method: H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons: 0.6
Waste Quantity: 1200
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2007
Gen EPA ID: CAD981686629

Shipment Date: 20070226
Creation Date: 9/20/2007 18:30:16
Receipt Date: 20070312
Manifest ID: 001021645FLE
Trans EPA ID: OHD042311209
Trans Name: ASHLAND INC
Trans 2 EPA ID: KS0000336891
Trans 2 Name: SAVANNAH TRANSPORT INC
TSDF EPA ID: ARD981057870
Trans Name: RINECO CHEMICAL INDUSTRIES INC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
CA Waste Code: 343 - Unspecified organic liquid mixture
RCRA Code: D001
Disposal Method: H061 - Fuel Blending Prior To Energy Recovery At Another Site

ZIEMAN MANUFACTURING (Continued) **S123614210**

Quantity Tons:	0.374
Waste Quantity:	110
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1995
Gen EPA ID:	CAD981686629
Shipment Date:	19950509
Creation Date:	4/2/1996 0:00:00
Receipt Date:	19950516
Manifest ID:	95341980
Trans EPA ID:	CAD063547996
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044429835
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD044429835
TSDF Alt Name:	Not reported
CA Waste Code:	214 - Unspecified solvent mixture
RCRA Code:	D001
Disposal Method:	R01 - Recycler
Quantity Tons:	2.574
Waste Quantity:	715
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1994
Gen EPA ID:	CAD981686629
Shipment Date:	19940606
Creation Date:	3/26/1996 0:00:00
Receipt Date:	Not reported
Manifest ID:	93045052
Trans EPA ID:	CAD980585293
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Disposal Method:	- Not reported

ZIEMAN MANUFACTURING (Continued) **S123614210**

Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940606
Creation Date:	3/26/1996 0:00:00
Receipt Date:	Not reported
Manifest ID:	93045053
Trans EPA ID:	CAD980585293
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044429835
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	214 - Unspecified solvent mixture
RCRA Code:	D001
Disposal Method:	- Not reported
Quantity Tons:	3.564
Waste Quantity:	990
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940120
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19940124
Manifest ID:	93077675
Trans EPA ID:	CAD041656851
Trans Name:	Not reported
Trans 2 EPA ID:	CAD010925576
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg
RCRA Code:	D035
Disposal Method:	H01 - Transfer Station
Quantity Tons:	1.1
Waste Quantity:	2200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

ZIEMAN MANUFACTURING (Continued) **S123614210**

Additional Info:

Year:	1996
Gen EPA ID:	CAD981686629
Shipment Date:	19960930
Creation Date:	6/26/1997 0:00:00
Receipt Date:	19961011
Manifest ID:	96031712
Trans EPA ID:	CAD980585293
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008364432
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	214 - Unspecified solvent mixture
RCRA Code:	D001
Disposal Method:	R01 - Recycler
Quantity Tons:	1.206
Waste Quantity:	335
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960826
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960910
Manifest ID:	96032096
Trans EPA ID:	CAD063547996
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044429835
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	214 - Unspecified solvent mixture
RCRA Code:	D001
Disposal Method:	R01 - Recycler
Quantity Tons:	1.386
Waste Quantity:	385
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1997
Gen EPA ID:	CAD981686629

ZIEMAN MANUFACTURING (Continued) **S123614210**

Shipment Date:	19971001
Creation Date:	7/23/1998 0:00:00
Receipt Date:	19971010
Manifest ID:	96683715
Trans EPA ID:	CAD980585293
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD089446710
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	214 - Unspecified solvent mixture
RCRA Code:	D001
Disposal Method:	H01 - Transfer Station
Quantity Tons:	1.332
Waste Quantity:	370
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2006
Gen EPA ID:	CAD981686629

Shipment Date:	20061003
Creation Date:	7/13/2007 18:30:12
Receipt Date:	20061012
Manifest ID:	000589380FLE
Trans EPA ID:	OHD042311209
Trans Name:	ASHLAND DISTRIBUTION
Trans 2 EPA ID:	KS0000336891
Trans 2 Name:	SAVANNAH TRANSPORT
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	214 - Unspecified solvent mixture
RCRA Code:	D001
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.792
Waste Quantity:	220
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1999
Gen EPA ID:	CAD981686629

ZIEMAN MANUFACTURING (Continued) **S123614210**

Shipment Date:	19990204
Creation Date:	4/1/1999 0:00:00
Receipt Date:	Not reported
Manifest ID:	98894964
Trans EPA ID:	CAD980675896
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	AZD980892731
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
CA Waste Code:	214 - Unspecified solvent mixture
RCRA Code:	D001
Disposal Method:	- Not reported
Quantity Tons:	0.54
Waste Quantity:	150
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	ZIEMAN MANUFACTURING
Address:	1805 E BEAMER ST
Address 2:	Not reported
City,State,Zip:	WOODLAND, CA 957766220
EPA ID:	CAD981686629
Inactive Date:	06/30/2008
Create Date:	04/10/1987
Last Act Date:	04/13/2010
Mailing Name:	Not reported
Mailing Address:	1805 E BEAMER ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	WOODLAND, CA 957766220
Owner Name:	ZIEMAN MANUFACTURING
Owner Address:	7909 PAINTER AVE
Owner Address 2:	Not reported
Owner City,State,Zip:	WHITTIER, CA 906022414
Contact Name:	JOE REYES / GENERAL MANAGER
Contact Address:	1805 E BEAMER ST
Contact Address 2:	Not reported
City,State,Zip:	WOODLAND, CA 957766220

NAICS:

EPA ID:	CAD981686629
Create Date:	2005-09-27 15:01:35
NAICS Code:	332812
NAICS Description:	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers
Issued EPA ID Date:	1987-04-10 00:00:00
Inactive Date:	2008-06-30 00:00:00
Facility Name:	ZIEMAN MANUFACTURING
Facility Address:	1805 E BEAMER ST
Facility Address 2:	Not reported

ZIEMAN MANUFACTURING (Continued) **S123614210**

Facility City:	WOODLAND
Facility County:	57
Facility State:	CA
Facility Zip:	957766220

5
SSE
1/4-1/2
0.307 mi.
1623 ft.

ADAMS GRAIN **UST** **U003850776**
17900 CR 102 **N/A**
WOODLAND, CA 95695

Relative:
Higher

Actual:
38 ft.

YOLO CO. UST:

Name:	ADAMS GRAIN
Address:	17900 CR 102
City,State,Zip:	WOODLAND, CA 95695
Facility Id:	FA0000005
Owner Id:	OW0000004
Owner Name:	ADAMS GRAIN CO
Owner Address:	PO BOX 799
Owner City/State/Zip:	ARBUCKLE, CA 95912
Billing Name:	ADAMS GRAIN CO
Billing Address1:	PO BOX 799
Billing City/State/Zip:	ARBUCKLE, CA 95912
Contact Name:	Not reported
Contact Phone:	Not reported
Current Status:	Inactive, non-billable
Program Element:	Not reported
Business Code:	09 - UNKNOWN
Business Type:	6 - OTHER
Tank Number:	1
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported
Product Type:	Diesel
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	01/01/93
INVGEN:	1993000005
Tank Number:	2
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported
Product Type:	Diesel
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	01/01/93
INVGEN:	1993000005
Tank Number:	3
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported

ADAMS GRAIN (Continued) **U003850776**

Product Type:	Diesel
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	01/01/93
INVGEN:	1993000005

6
West
1/4-1/2
0.348 mi.
1839 ft.

WILBUR-ELLIS COMPANY - WOODLAND **UST** **U004014040**
1785 E BEAMER ST **N/A**
WOODLAND, CA 95695

Relative:
Higher

Actual:
42 ft.

YOLO CO. UST:

Name:	WILBUR-ELLIS COMPANY - WOODLAND
Address:	1785 E BEAMER ST
City,State,Zip:	WOODLAND, CA 95695
Facility Id:	FA0000543
Owner Id:	OW0007044
Owner Name:	WILBUR-ELLIS COMPANY LLC
Owner Address:	1785 E BEAMER ST
Owner City/State/Zip:	WOODLAND, CA 95776
Billing Name:	WILBUR-ELLIS COMPANY - WOODLAND
Billing Address1:	16300 CHRISTENSEN RD STE 135
Billing City/State/Zip:	TUKWILA, WA 98188
Contact Name:	Not reported
Contact Phone:	Not reported
Current Status:	Inactive, non-billable
Program Element:	Not reported
Business Code:	09 - UNKNOWN
Business Type:	6 - OTHER
Tank Number:	1
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported
Product Type:	Regular Unleaded
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	Not reported
INVGEN:	000543
Tank Number:	2
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported
Product Type:	Diesel
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	Not reported
INVGEN:	000543
Tank Number:	3
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported

WILBUR-ELLIS COMPANY - WOODLAND (Continued) **U004014040**

Product Type:	Regular Unleaded
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	Not reported
INVGEN:	000543

7
South
1/4-1/2
0.468 mi.
2472 ft.

Relative:
Higher

Actual:
41 ft.

ALFOREX SEEDS LLC (CAL WEST SEEDS LLC) **UST** **U003895058**
41970 E MAIN ST **N/A**
WOODLAND, CA 95776

YOLO CO. UST:

Name:	ALFOREX SEEDS LLC (CAL WEST SEEDS LLC)
Address:	41970 E MAIN ST
City,State,Zip:	WOODLAND, CA 95776
Facility Id:	FA0000076
Owner Id:	OW0000047
Owner Name:	DOW AGROSCIENCES LLC
Owner Address:	9330 ZIONSVILLE RD
Owner City/State/Zip:	INDIANAPOLIS, IN 46268
Billing Name:	ALFOREX SEEDS LLC (CAL WEST SEEDS LLC)
Billing Address1:	38001 CR 29
Billing City/State/Zip:	WOODLAND, CA 95695
Contact Name:	Not reported
Contact Phone:	Not reported
Current Status:	Inactive, non-billable
Program Element:	Not reported
Business Code:	09 - UNKNOWN
Business Type:	6 - OTHER
Tank Number:	1
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported
Product Type:	Regular Unleaded
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	01/01/87
INVGEN:	1987000076
Tank Number:	2
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported
Product Type:	Regular Unleaded
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	01/01/87
INVGEN:	1987000076
Tank Number:	3
Tank Status:	Not reported
Tank Type:	Not reported
Tank Description:	Not reported
Tank Capacity:	Not reported

ALFOREX SEEDS LLC (CAL WEST SEEDS LLC) (Continued) **U003895058**

Product Type:	Regular Unleaded
Leak Detection Number:	Not reported
LEA Id:	Not reported
Surcharge Year:	01/01/87
INVGEN:	1987000076

B8 **WILBUR ELLIS** **RESPONSE** **S103639156**
South **1962 HAYS LN** **ENVIROSTOR** **N/A**
1/2-1 **WOODLAND, CA 95776**
0.672 mi.
3549 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
39 ft.

RESPONSE:

Name:	WILBUR ELLIS
Address:	1962 HAYS LN
City,State,Zip:	WOODLAND, CA 95776
Facility ID:	57280026
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	Not reported
National Priorities List:	NO
Cleanup Oversight Agencies:	NONE SPECIFIED
Lead Agency Description:	Not reported
Project Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Sacramento
Site Code:	Not reported
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	04
Senate:	03
Special Program Status:	Not reported
Status:	Certified
Status Date:	01/01/1983
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	38.67560
Longitude:	-121.7315
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC :	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	WILBUR - ELLIS COMPANY
Alias Type:	Alternate Name
Alias Name:	110002943281
Alias Type:	EPA (FRS #)
Alias Name:	T10000001198
Alias Type:	GeoTracker Global ID
Alias Name:	57280026
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	01/01/1983
Comments:	Not reported

WILBUR ELLIS (Continued) **S103639156**

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

ENVIROSTOR:
Name: WILBUR ELLIS
Address: 1962 HAYS LN
City,State,Zip: WOODLAND, CA 95776
Facility ID: 57280026
Status: Certified
Status Date: 01/01/1983
Site Code: Not reported
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Sacramento
Assembly: 04
Senate: 03
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 38.67560
Longitude: -121.7315
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: WILBUR - ELLIS COMPANY
Alias Type: Alternate Name
Alias Name: 110002943281
Alias Type: EPA (FRS #)
Alias Name: T10000001198
Alias Type: GeoTracker Global ID
Alias Name: 57280026
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 01/01/1983
Comments: Not reported

Future Area Name: Not reported

WILBUR ELLIS (Continued) **S103639156**

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

B9 **WILBUR ELLIS** **HIST Cal-Sites** **S101482932**
South **1962 HAYS LN** **CERS** **N/A**
1/2-1 **WOODLAND, CA 95776**
0.672 mi.
3549 ft. **Site 2 of 2 in cluster B**

Relative: **Higher**

Actual: **39 ft.**

Calsite:

Name:	WILBUR ELLIS
Address:	1962 HAYS LN
City:	WOODLAND
Region:	SACRAMENTO
Facility ID:	57280026
Facility Type:	RP
Type:	RESPONSIBLE PARTY
Branch:	CC
Branch Name:	CENTRAL CALIFORNIA
File Name:	Not reported
State Senate District:	01011983
Status:	CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT
Status Name:	CERTIFIED
Lead Agency:	N/A
NPL:	Not reported
SIC Code:	28
SIC Name:	MANU - CHEMICALS & ALLIED PRODUCTS
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Not reported
Staff Member Responsible for Site:	Not reported
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	Not reported
Region Water Control Board Name:	Not reported
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	08
State Senate District Code:	05
Facility ID:	57280026
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01011983
Est Person-Yrs to complete:	0
Estimated Size:	Not reported

WILBUR ELLIS (Continued) **S101482932**

Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	1962 HAYS AVENUE
Alternate City,St,Zip:	WOODLAND, CA 95695
Alternate Address:	1962 HAYS LN
Alternate City,St,Zip:	WOODLAND, CA 95776
Background Info:	Not reported
Comments Date:	07221980
Comments:	Questionnaire sent.
Comments Date:	08191991
Comments:	Records Search: Site Certified in 1983.
Comments Date:	08201980
Comments:	Questionnaire Received: Recommend NFA based on questionnaire
ID Name:	Not reported
ID Value:	Not reported
Alternate Name:	WILBUR - ELLIS COMPANY
Alternate Name:	WILBUR ELLIS
Alternate Name:	Not reported
Special Programs Code:	Not reported
Special Programs Name:	Not reported

CERS:

Name:	WILBUR ELLIS
Address:	1962 HAYS LN
City,State,Zip:	WOODLAND, CA 95776
Site ID:	189999
CERS ID:	57280026
CERS Description:	State Response

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WOODLAND	S107541182		WEST OF 1350 E BEAMER ST	95776	CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

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: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
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: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
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.

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: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
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: 04/03/2020
Next Scheduled EDR Contact: 07/13/2020
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 know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/27/2020
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
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 11/13/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 76

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/24/2020
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: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

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

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 78

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
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: 01/27/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
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 identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/27/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
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 inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/10/2020
Date Data Arrived at EDR: 02/11/2020
Date Made Active in Reports: 04/20/2020
Number of Days to Update: 69

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/12/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/15/2019
Date Data Arrived at EDR: 12/17/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

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

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
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
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

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: 03/19/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
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: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 73

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
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: 12/06/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/25/2020
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/11/2020
Next Scheduled EDR Contact: 06/22/2020
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
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/12/2020
Next Scheduled EDR Contact: 06/29/2020
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: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
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: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/27/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 72
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/18/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/18/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 62
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
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: 12/02/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 81
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/17/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 11/15/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 69

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/24/2020
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
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
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
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

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

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/01/2020
Next Scheduled EDR Contact: 08/10/2020
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
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: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
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
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/27/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
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: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 07/20/2020
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.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
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: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
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: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
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: 12/19/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 60

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
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.

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: 08/01/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/11/2019
Number of Days to Update: 70

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
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: 03/03/2020
Date Data Arrived at EDR: 03/05/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
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: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

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

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
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: 12/05/2019
Date Data Arrived at EDR: 12/06/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 70

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
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: 12/24/2019
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 03/30/2020
Number of Days to Update: 68

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
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: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 1

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
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: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Quarterly

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
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
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: 01/28/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 85

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
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
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
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
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/06/2020
Next Scheduled EDR Contact: 07/20/2020
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.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 08/24/2020
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: 12/16/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/04/2020
Next Scheduled EDR Contact: 08/17/2020
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
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2020
Next Scheduled EDR Contact: 08/17/2020
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
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 06/29/2020
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.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/05/2020
Next Scheduled EDR Contact: 06/01/2020
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: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
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: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 06/15/2020
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: 11/05/2019
Date Data Arrived at EDR: 11/20/2019
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 149

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/15/2020
Next Scheduled EDR Contact: 08/03/2020
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

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/06/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 8

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/17/2020
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
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
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
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
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
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

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

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

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

Date of Government Version: 10/25/2019
Date Data Arrived at EDR: 10/25/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 82

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/06/2020
Next Scheduled EDR Contact: 06/15/2020
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
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
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: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/08/2020
Next Scheduled EDR Contact: 08/17/2020
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
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 07/13/2020
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
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

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

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
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: 12/31/2019
Date Data Arrived at EDR: 01/17/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 49

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
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: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
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: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
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: 04/29/2020
Next Scheduled EDR Contact: 08/17/2020
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.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
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 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

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

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

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

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

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

MINES VIOLATIONS: MSHA Violation Assessment Data

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

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: 03/02/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/06/2019
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: 02/25/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 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: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
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: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
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: 12/09/2019
Date Data Arrived at EDR: 12/11/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 78

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/05/2020
Next Scheduled EDR Contact: 06/22/2020
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: 11/22/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 03/02/2020
Number of Days to Update: 89

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
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: 04/03/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

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
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
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: 01/05/2020
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/07/2020
Next Scheduled EDR Contact: 07/20/2020
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: 02/18/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 85

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
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
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/18/2019
Date Data Arrived at EDR: 12/20/2019
Date Made Active in Reports: 02/20/2020
Number of Days to Update: 62

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 02/04/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 65

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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: 02/27/2020
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 69

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
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: 12/04/2019
Date Data Arrived at EDR: 01/29/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 71

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 01/31/2020
Date Data Arrived at EDR: 01/31/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 69

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

EMI: Emissions Inventory Data

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

Date of Government Version: 12/31/2017
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: 03/20/2020
Next Scheduled EDR Contact: 06/29/2020
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: 04/03/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 8

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 69

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/19/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 04/29/2020
Next Scheduled EDR Contact: 08/24/2020
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
Date Data Arrived at EDR: 05/29/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 54

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/15/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Annually

ICE: ICE

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

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 65

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
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
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: 02/18/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 65

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
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: 01/06/2020
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/24/2020
Number of Days to Update: 76

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
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: 02/12/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 72

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/10/2020
Date Data Arrived at EDR: 02/11/2020
Date Made Active in Reports: 04/20/2020
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/12/2020
Next Scheduled EDR Contact: 08/24/2020
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: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 72

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
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: 12/11/2019
Date Data Arrived at EDR: 12/12/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/12/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/06/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
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: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
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
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/18/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
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: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
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: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
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: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

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

Non-Case Information sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Varies

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

Other Oil & Gas Projects sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
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: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/13/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

The Hazardous Waste Tracking System (HWTS) is the Department of Toxic Substances Control?s data repository for hazardous waste Identification (ID) numbers and manifest information. HWTS generates reports on hazardous waste shipments for generators, transporters, and TSDFs.

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 11/14/2019
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
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: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
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.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 01/06/2020
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 59

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/20/2020
Next Scheduled EDR Contact: 07/20/2020
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: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
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: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 63

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/18/2020
Next Scheduled EDR Contact: 07/06/2020
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: 04/06/2020
Next Scheduled EDR Contact: 08/17/2020
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: 02/14/2020
Date Data Arrived at EDR: 02/18/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 66

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 12/27/2019
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 72

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/03/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 62

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/10/2020
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: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
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: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

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: 03/26/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 03/30/2020
Number of Days to Update: 67

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/31/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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: 02/13/2020
Date Data Arrived at EDR: 02/14/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 70

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 01/15/2020
Date Data Arrived at EDR: 01/16/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 76

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/13/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 01/31/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 69

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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: 03/12/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/15/2020
Date Data Arrived at EDR: 01/16/2020
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 22

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/13/2020
Date Data Arrived at EDR: 01/14/2020
Date Made Active in Reports: 03/24/2020
Number of Days to Update: 70

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/14/2020
Next Scheduled EDR Contact: 07/27/2020
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: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/27/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42
Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/17/2020
Next Scheduled EDR Contact: 07/27/2020
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
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/27/2020
Next Scheduled EDR Contact: 07/06/2020
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
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/27/2020
Next Scheduled EDR Contact: 07/06/2020
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: 12/31/2019
Date Data Arrived at EDR: 01/14/2020
Date Made Active in Reports: 03/24/2020
Number of Days to Update: 70
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/14/2020
Next Scheduled EDR Contact: 07/27/2020
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
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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: 02/24/2020
Date Data Arrived at EDR: 02/25/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
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
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/20/2019
Date Made Active in Reports: 01/03/2020
Number of Days to Update: 44

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2020
Date Data Arrived at EDR: 03/05/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 69

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
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: 62

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/13/2020
Next Scheduled EDR Contact: 07/13/2020
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: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
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: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/05/2020
Date Data Arrived at EDR: 02/06/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 69

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/04/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Annually

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

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/04/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

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

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 02/04/2020
Date Made Active in Reports: 04/10/2020
Number of Days to Update: 66

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/05/2020
Next Scheduled EDR Contact: 08/17/2020
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: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
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: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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: 02/10/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Quarterly

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: 02/10/2020
Next Scheduled EDR Contact: 06/29/2020
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: 11/14/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/20/2020
Number of Days to Update: 59

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
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: 11/14/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 60

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 02/12/2020
Date Data Arrived at EDR: 02/13/2020
Date Made Active in Reports: 04/23/2020
Number of Days to Update: 70

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 71

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
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: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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: 12/26/2019
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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: 01/08/2020
Date Data Arrived at EDR: 01/09/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 57

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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: 03/12/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
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: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 02/20/2020
Next Scheduled EDR Contact: 06/22/2020
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: 03/05/2020
Next Scheduled EDR Contact: 06/22/2020
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: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/14/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 65

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
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: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 04/22/2020
Date Data Arrived at EDR: 04/24/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 13

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
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: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
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: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/04/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 71

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 03/11/2020
Number of Days to Update: 14

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/18/2020
Next Scheduled EDR Contact: 07/06/2020
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: 01/02/2020
Date Data Arrived at EDR: 01/03/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 62

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 04/06/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/04/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 01/23/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/08/2020
Number of Days to Update: 66

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

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: 05/14/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 03/30/2020
Number of Days to Update: 67

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 02/10/2020
Date Data Arrived at EDR: 02/11/2020
Date Made Active in Reports: 04/20/2020
Number of Days to Update: 69

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/17/2020
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: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
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: 12/26/2019
Date Data Arrived at EDR: 01/24/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 68

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 07/13/2020
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: 04/29/2020
Next Scheduled EDR Contact: 08/24/2020
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: 12/26/2019
Date Data Arrived at EDR: 01/24/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 68

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/20/2020
Next Scheduled EDR Contact: 08/03/2020
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: 11/26/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 73

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/10/2020
Next Scheduled EDR Contact: 06/22/2020
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: 12/12/2019
Date Data Arrived at EDR: 01/15/2020
Date Made Active in Reports: 03/25/2020
Number of Days to Update: 70

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/27/2020
Date Data Arrived at EDR: 02/12/2020
Date Made Active in Reports: 04/23/2020
Number of Days to Update: 71

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
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: 01/30/2020
Date Data Arrived at EDR: 01/30/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 39

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/12/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
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
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: 04/29/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/09/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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APPENDIX E

Preliminary Screen for Vapor Encroachment Conditions Matrix

Screen for Vapor Encroachment Conditions Matrix
EAST BEAMER HOUSING PROJECT PROPERTY
WKA No. 12185.04P

Phase I ESA Screen for Vapor Encroachment Conditions (VEC) matrix includes a (1) **Search Radius Test,** (2) **Chemicals of Concern Test (COC),** and (3) a **Critical Distance Test**[1].

(1) Search Radius Test: Are there any known or suspect contaminated sites in the primary area of concern within the corresponding search radii? (if yes, see attached Table A).

Yes (No) If No, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If Yes, then:

(2) **Chemicals of Concern**[2] **Test**: Are COC likely to be present within the area of concern for those known or suspect contaminated sites identified based on the Search Distance Test?

Yes No If No, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If Yes, then:

If Yes, check all COC that apply on attached Table B.

(3) Critical Distance Test: A plume test to determine whether or not COC in the contaminated plume(s) may be within the critical distance.

(3a) Is information related to the contaminated(s) plume available (i.e. isoconcentration maps, site drawings, etc.)?
Yes No

(3b) If ***No***, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If ***Yes***, then:

(3c) Is the site less than 100 feet to the nearest edge of a contaminated [non-petroleum hydrocarbon] plume(s)?
Yes No

(3d) Is the site less than 30 feet to the nearest edge of a dissolved petroleum hydrocarbon plume(s)?
Yes No

If the distance from the nearest edge of a contaminated plume to the nearest existing or planned structure on the site is less than 100 feet for non-petroleum hydrocarbon COC, or less than 30 feet for dissolved petroleum hydrocarbons, then it is presumed that a VEC *currently* exists beneath the site. If the distance from the nearest edge of the contaminated plume is greater than or equal to 100 feet for non-petroleum hydrocarbons, or 30 feet for dissolved petroleum hydrocarbon chemicals of concern, then it is presumed unlikely that a VEC *currently* exists beneath the site.

(4) Is it likely that a VEC *currently* exists beneath the site?
Yes (No) If *Yes,* then recommend performing a full scope VEC assessment according to ASTM E 2600-15.

[1] Based on guidance presented in the ASTM E 2600-15 Standard.
[2] Chemical(s) of concern (COC): See attached table for typical chemicals of concern (as presented in Appendix X6.1 of the ASTM E 2600-15 Standard).