City of Elk Grove
Development Services Department

Laguna Main Street Apartments Project

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

April 2021

RANEY PLANNING & MANAGEMENT, INC.
20 years
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INITIAL STUDY

April 2021

BACKGROUND

1. Project Title: Laguna Main Street Apartments Project

2. Lead Agency Name and Address: City of Elk Grove
Development Services Department
8401 Laguna Palms Way
Elk Grove, CA 95758

3. Contact Person and Phone Number: Sarah Kirchgessner
Project Planner
(916) 478-2245

4. Project Location: South of Vaux Avenue, between Nolan Street and Peets Street
Elk Grove, CA 95758

5. Project Sponsor's Name and Address: KF Properties, Inc.
9105 Laguna Main Street, Suite #130
Elk Grove, CA, 95758
(916) 619-0781

6. Existing General Plan Designation: Community Commercial (CC)

7. Existing Zoning Designation: Limited Commercial (LC)

8. Proposed General Plan Designation: Residential Mixed Use (RMU)

9. Proposed Zoning Designation: Residential Mixed Use (RMU)

10. Required Approvals from Other Public Agencies: None

11. Surrounding Land Uses and Setting:

The Laguna Main Street Apartments Project (Project) site consists of four parcels that total approximately 5.86 acres, located south of Vaux Avenue, between Nolan Street and Peets Street, in the City of Elk Grove, California. Currently, the Project site is vacant and undeveloped. The site consists primarily of ruderal grasses that are regularly disked. Surrounding land uses include commercial businesses to the north, Laguna Town Hall and Laguna KinderCare to the south, a church to the southeast, and multi-family residences to the east, west, and southwest. The City of Elk Grove General Plan designates the site as Community Commercial (CC) and the site is zoned Limited Commercial (LC).

12. Project Description Summary:

    The Project would include the development of two apartment complexes consisting of 74 multi-family residential units each. The 148 total units would be spread throughout six separate three-story buildings. The two apartment complexes would be separated by Laguna Main Street. The proposed apartment complexes would include two clubhouses, a pool and spa, outdoor common areas, and covered parking, as well as tuck under garages. The Project would require the approval of a General Plan Amendment (GPA) and a rezone to change the site's General Plan land use and zoning designations to Residential Mixed Use (RMU), and a Major Design Review. A Special Parking Permit reduction of 14.7 percent would also be required.

13. 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), tribal consultation letters were sent to the Buena Vista Rancheria of Me-Wuk Indians, the Chicken Ranch Rancheria of Me-Wuk Indians, the Ione Band of Miwok Indians, the Nashville Enterprise Miwok-Maidu-Nishinam Tribe, the United Auburn Community of the Auburn Rancheria, and the Wilton Rancheria on October 26, 2020 seeking input regarding the potential for tribal cultural resources to be disturbed within the project site. Consultation requests from the contacted tribes have not been received by the City to date.

SOURCES

The following documents are referenced information sources used for the purposes of this Initial Study/Mitigated Negative Declaration (IS/MND):

1. California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed September 2020.
2. California Department of Forestry and Fire Protection. *California Fire Hazard Severity Zone Viewer*. Available at: https://egis.fire.ca.gov/FHSZ/. Accessed October 2020.
3. California Department of Transportation. *California Scenic Highway Mapping System*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed September 2020.
4. City of Elk Grove. *Climate Action Plan: 2018 Update*. January 2019.
5. City of Elk Grove. *General Plan Update Draft Environmental Impact Report*. February 2019.
6. City of Elk Grove. *General Plan.* February 2019.
7. City of Elk Grove. *Historic Preservation Committee*. Available at: https://www.elkgrovecity.org/cms/One.aspx?portalId=109669&pageId=120058. Accessed February 2021.
8. City of Elk Grove. *Municipal Code, Section 6.32.100.* Current through January 7, 2021.
9. City of Elk Grove. *Swainson's Hawk Program*. Available at: http://www.elkgrovecity.org/city_hall/departments_divisions/planning/resources_and_policies/swainsons_hawk_program. Accessed July 2019.
10. City of Elk Grove. *Transportation Analysis Guidelines.* February 2019.
11. Consumnes Community Services District. *Bartholomew Park.* Available at: https://www.yourcsd.com/578/Bartholomew-Park. Accessed January 2021.
12. Cosumnes Fire Department. *2018 Annual Report*. 2020.

13. Cosumnes Fire Department. *Operations Division*. Available at: https://www.yourcsd.com/469/Operations-Division. Accessed August 2020.
14. Federal Emergency Management Agency. *National Flood Hazard Layer*. Available at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed August 2020.
15. Fehr & Peers. *Laguna Main Street Apartments IS/MND – Transportation Analysis.* November 18, 2020.
16. Hunter Environmental. *Laguna Main Street Apartments (PLNG-047).* April 1, 2021.
17. j.c. brennan & associates, inc*. Laguna Main Street Apartment Environmental Noise Assessment, City of Elk Grove, California, jcb Project #2020-130.* December 22, 2020.
18. Native American Heritage Commission. *Native American Consultation, Pursuant to Senate Bill 18 (SB 18), Government Codes 65352.3 and 65352.4, as well as Assembly Bill 52 (AB52), Public Resources Codes 21080.1, 21080.3.1, and 21080.3.2, Laguna Main Street Apartments PLNG10-047, Sacramento County.* October 20, 2020.
19. North Central Information Center. *Records Search Results for Laguna Main Street Apartments Project (APNs: 119-1110-009, -010, -013, -014).* October 14, 2020.
20. Peabody Engineering. *Drainage Study Narrative for Laguna Main Apartments*. City of Elk Grove, California. February 9, 2021.
21. Sacramento Area Sewer District. *Sewer Ordinance.* January 10, 2018.
22. Sacramento Metropolitan Air Quality Management District. *Climate Action Planning in the Sacramento Metropolitan Air Quality Management District.* November 2017.
23. Sacramento Metropolitan Air Quality Management District. *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.* October 2020.
24. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment in Sacramento County*. May 2018. Available at: http://www.airquality.org/ceqa/ceqaguideupdate.shtml. Accessed September 2020.
25. State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/. Accessed August 2020.
26. Wallace-Kuhl & Associates. *Phase I Environmental Site Assessment, Sheldon Grove Subdivision, Power Inn Road and Sheldon Road, Elk Grove, California, WKA No. 12865.01.* August 12, 2020.
27. Youngdahl Consulting Group, Inc. *Laguna Apartments: Laguna Main Street & Vaux Avenue, Elk Grove, California: Geotechnical Engineering Study Update*. June 2, 2020.

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 Incorporated" 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**
☐ **Utilities and Service Systems**	☐ **Wildfire**	☐ **Mandatory Findings of Significance**

DETERMINATION

On the basis of this initial study:

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

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

☐ I find that the 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 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 Project, nothing further is required.

Signature	Date
Sarah Kirchgessner, Project Planner	City of Elk Grove
Printed Name	For

BACKGROUND AND INTRODUCTION

This Initial Study identifies and analyzes the potential environmental impacts of the Project. The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines. Where the analysis provided in this document identifies potentially significant environmental effects of the proposed project, mitigation measures are prescribed. The mitigation measures prescribed for environmental effects described in this IS/MND would be implemented in conjunction with the Project, as required by CEQA. The mitigation measures would be incorporated into the Project through project conditions of approval. The City would adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with approval of the Project.

In February 2019, the City of Elk Grove approved a new General Plan and certified an associated Environmental Impact Report (EIR) for the updated General Plan. The General Plan EIR is a program EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 *et seq*.). The General Plan EIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan. Consistent with Section 15150 of the CEQA Guidelines, applicable portions of the General Plan and General Plan EIR are incorporated by reference as part of this IS/MND.

PROJECT DESCRIPTION

The following provides a description of the Project site's location and current setting, as well as the project components and the discretionary actions required for the project. It should be noted that for the purposes of this environmental analysis, the term "Project site" refers to the combined 5.86 acres. When referring to the development areas located to the west and east of Laguna Main Street, the terms "Western Parcels" and "Eastern Parcels" are used.

Project Location and Setting

The Project site consists of four parcels that total approximately 5.86 acres, located south of Vaux Avenue, between Nolan Street and Peets Street, in the City of Elk Grove, California (see Figure 1 and Figure 2). Currently, the Project site is vacant and undeveloped. The site is generally flat and consists primarily of ruderal grasses that are regularly disked. The Project site does not contain any wetland features or waterways. As shown in Figure 2, trees are located along the northern, eastern, and southern boundaries of the Eastern Parcels, and along the northern and southern boundaries of the Western Parcels. Two bus stops located on either side of Vaux Avenue are located near the northwestern corner of the Eastern Parcel. The four parcels that comprise the project site are identified by Assessor's Parcel Numbers (APNs) 119-1110-009, -010, -013, and -014.

The City of Elk Grove General Plan designates the site as CC and the site is zoned LC. Surrounding land uses include commercial businesses to the north, Laguna Town Hall and KinderCare to the south, a church to the southeast, and multi-family residences to the east, west, and southwest.

Figure 1
Regional Project Location

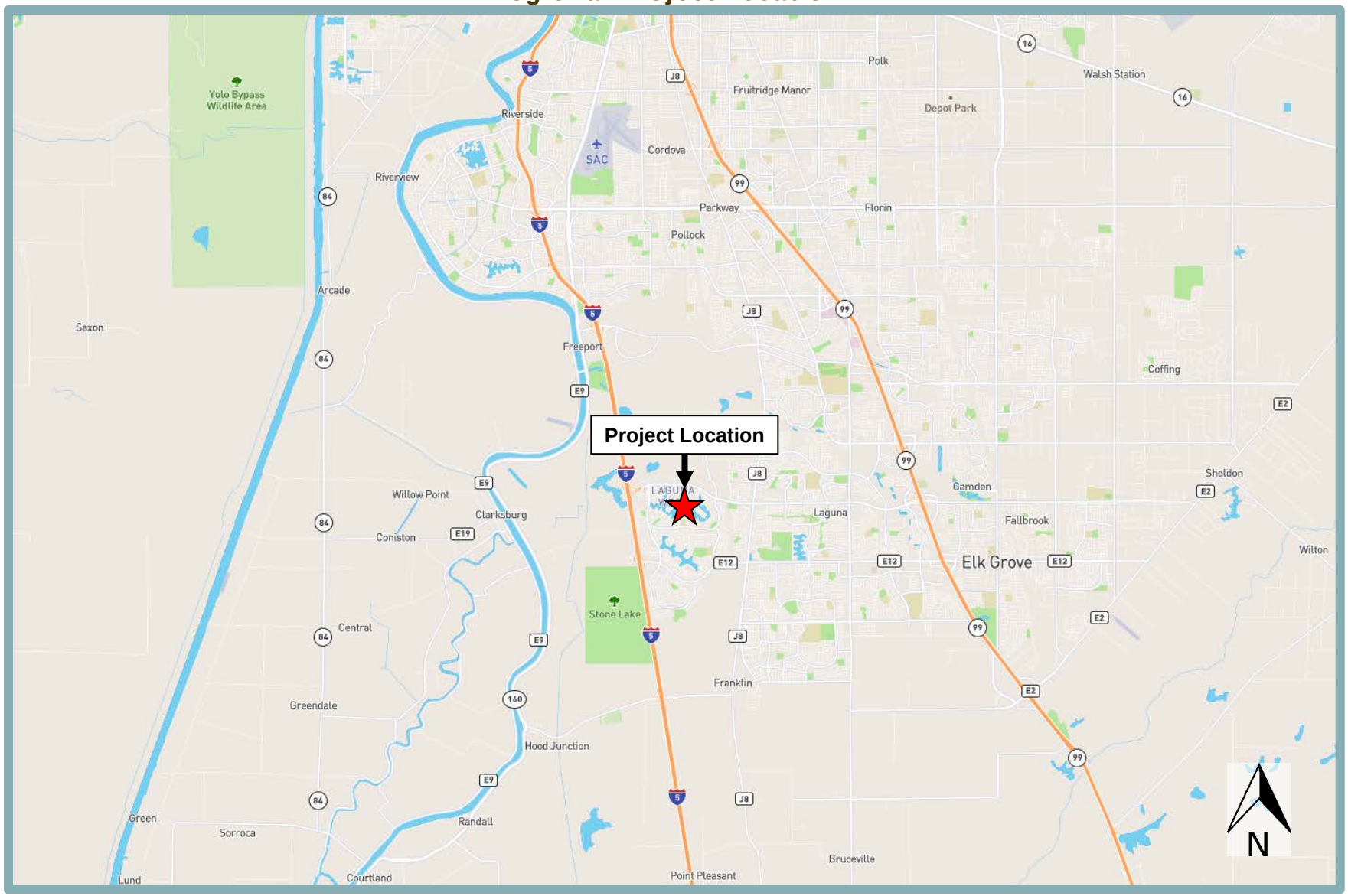
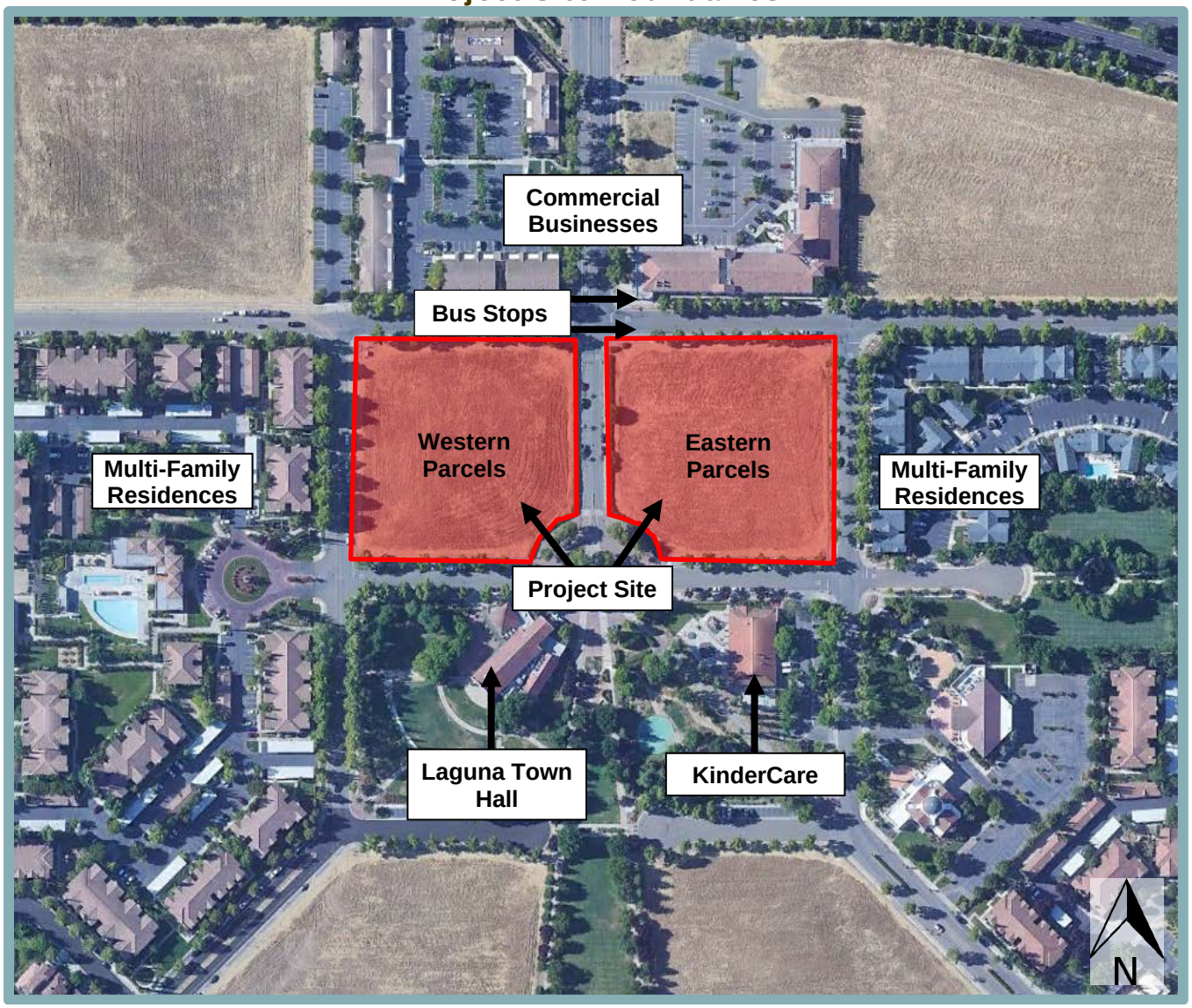


Figure 2
Project Site Boundaries



Project Components

The Project would include the development of two apartment complexes consisting of 74 multi-family residential units each (see Figure 3). The 148 total units would be spread throughout six separate three-story buildings. The two apartment complexes would be separated by Laguna Main Street. The Project would require the approval of a GPA to redesignate the site as RMU, a rezone of the site to RMU, a Special Parking Permit, and a Major Design Review. The Project components and requested approvals are discussed in detail below.

Proposed Apartments

The proposed apartment complexes would consist of six buildings, with three buildings located on either side of Laguna Main Street. The Western Parcels would be developed as follows:

- Building 1 would be situated along the northern boundary and consist of 10 units;
- Building 2 would be situated along the southern boundary and consist of 35 units; and
- Building 3 would be situated along the western side of Laguna Main Street and consist of 29 units.

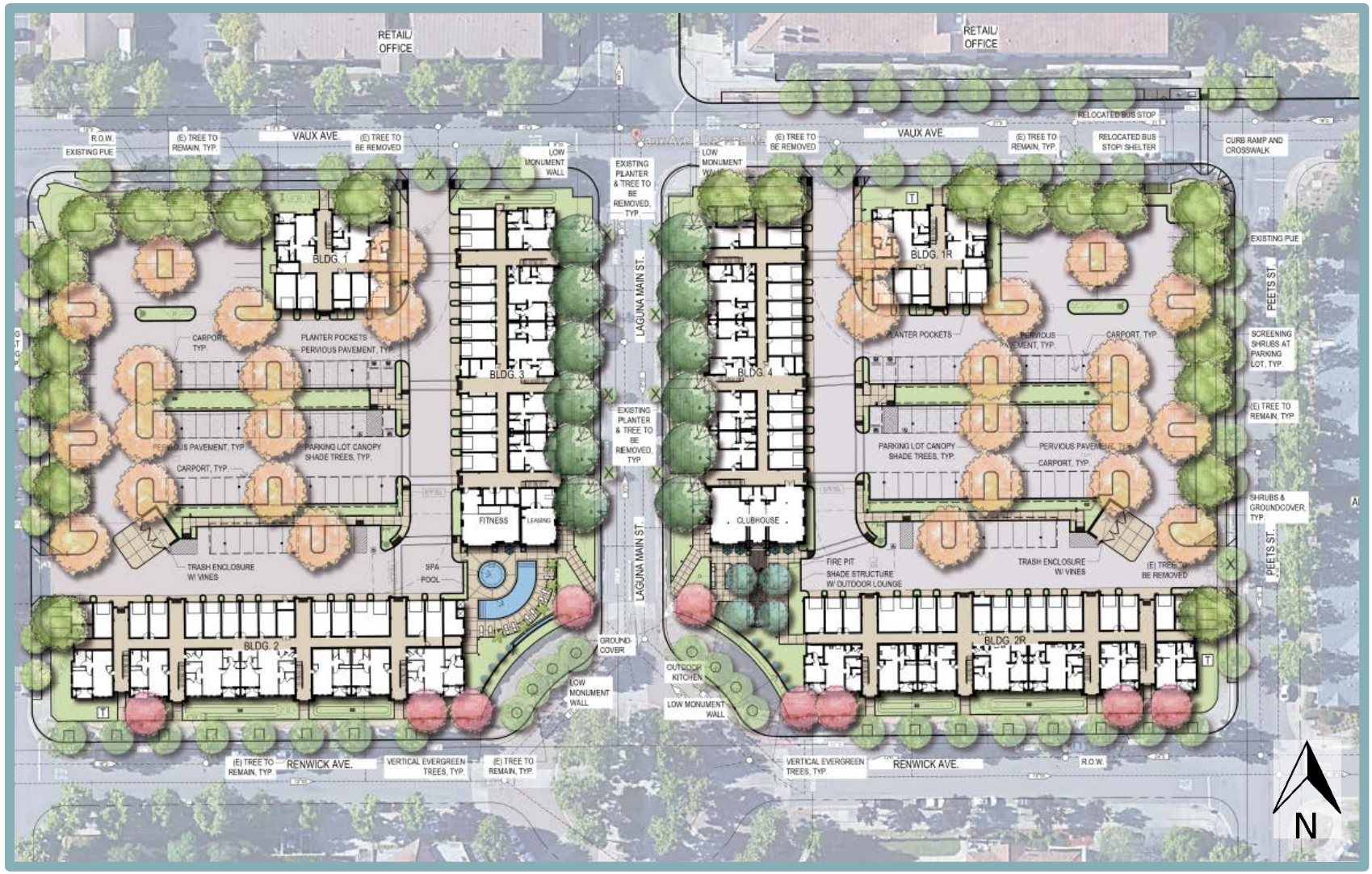
The Eastern Parcels would be developed as follows:

- Building 4 would be situated along the eastern side of Laguna Main Street and consist of 29 units;
- Building 1R would be situated along the northern boundary and consist of 10 units; and
- Building 2R would be situated along the southern boundary and consist of 35 units.

The apartment complex on the Western Parcels would include a small clubhouse, a pool and spa, outdoor showers, meeting areas, and a fitness center. The apartment complex on the Eastern Parcels would include a small clubhouse, an outdoor kitchen, an outdoor lounge, and a fire pit. A trash enclosure would be provided in the parking area of each apartment complex.

The proposed project includes 250 parking spaces. The Elk Grove Municipal Code (EGMC) requires 293 spaces for the 148 units. Because sufficient street parking exists to provide approximately 113 on-street parking spaces, a Special Parking Permit reduction of 14.7% is being requested. Each complex would include 125 parking spaces, including 29 spaces located in garages, 43 spaces located in carports, and 53 uncovered spaces, for a total of 250 on-site parking spaces. The parking lot within the Western Parcels would be located centrally and along the northwestern boundary of the site, while the parking spaces within the Eastern Parcels would be located centrally and along the northeastern boundary. Each complex would provide three Americans with Disabilities Act (ADA) spaces. In addition, 54 long-term bicycle parking spaces would be provided within two converted garage spaces in each complex. A bicycle storage room capable of holding 27 bicycles would be located in Building 2, and another bicycle storage room capable of storing 27 bicycles would be located in Building 2R. Long-term bicycle storage would also be possible within the 58 private garages provided as part of the Project. Short-term bicycle parking would be provided near the leasing area and clubhouse areas of Buildings 3 and 4. Overall, the provision of 124 bicycle spaces would result in a ratio of 0.84 bicycles per residential unit.

Figure 3
Site Plan Overview



Emergency vehicles would have access to the project site through full-access 26-foot-wide driveways connecting to internal drive aisles. The internal drive aisles would include a 25- to 50-foot fire turning radius for emergency vehicles and fire response vehicles. The structures within the Western Parcels could be accessed through two driveways located along Nolan Street and Vaux Avenue, while the Eastern Parcels could be accessed through two driveways located along Peets Street and Vaux Avenue.

Consistent with Section 23.54.040 of the City's Municipal Code, landscaping would be provided throughout the site in accordance with the City's minimum landscape requirements for residential zones. The existing landscaping trees within the Project site would be retained as part of the Project, and new trees would be planted within the proposed parking areas as well as along the Project frontages. The proposed trees would provide shade cover for the proposed buildings and parking areas. Drought-tolerant landscaping elements, including shrubs, vines, and ground cover, along the Project frontages would also be included as part of the proposed landscaping plans (see Figure 4 and Figure 5).

Water supply to the proposed development would be provided by the Sacramento County Water Agency (SCWA) by way of new connections to existing 12-inch water lines located within Nolan Street and Peets Street (see Figure 6 and Figure 7). Sewer service would be provided by the Sacramento Area Sewer District (SASD) by way of new connections to existing eight-inch sewer lines located in Peets Street and Nolan Street, as well as existing eight- and 12-inch sewer lines in Vaux Avenue and Renwick Avenue.

Stormwater within the Project site would be captured by a series of stormwater planters and bioswales (see Figure 8 and Figure 9). The stormwater planters would be located within the medians of the parking areas, while the bioswales would be located along the perimeter of each apartment complex. The stormwater planters and bioswales would treat stormwater by filtering runoff slowly through an active layer of soil, allowing for removal of pollutants. Following treatment within the stormwater planter and bioswales, stormwater would be captured by underdrains and discharged through new 12-inch underground storm drains connecting to existing 15- to 30-inch storm drains located within Nolan Street, Laguna Main Street, Renwick Avenue, and Peets Street.

The proposed project would relocate the existing bus shelter and exiting bus sign on the south side of Vaux Avenue to the east near the corner of Peets Street and include a new concrete pad in the parkway. The existing bus stop on the north side of Vaux Avenue would also be moved to the east with a new concrete pad and relocated bus sign. To provide access to the east- and west-bound bus stops, a cross walk across Vaux Avenue and a new curb ramp on the north side of Vaux Avenue between the existing trees would be included to promote pedestrian access to the three-way bus stop.

General Plan Amendment and Rezone

The Project would require a GPA to change the site's General Plan land use designation from CC to RMU. In addition, the Project would require a rezone to change the site's zoning designation from LC to RMU. RMU projects are generally characterized by pedestrian-oriented development, including integrated public plazas, with vertical mixes of uses that feature ground-floor activity spaces, live-work units, or retail or office uses which contain residential uses above. Per the General Plan, single-use buildings may also be appropriate, with the predominant use intended to be residential uses supported by commercial or office uses. In addition, RMU land uses are generally located along transit corridors with access from at least one major roadway, or may provide secondary access from minor or local roadways. RMU projects are often used as buffers between commercial or employment land uses and residential areas.

Figure 4
Landscaping Plan – Western Parcels

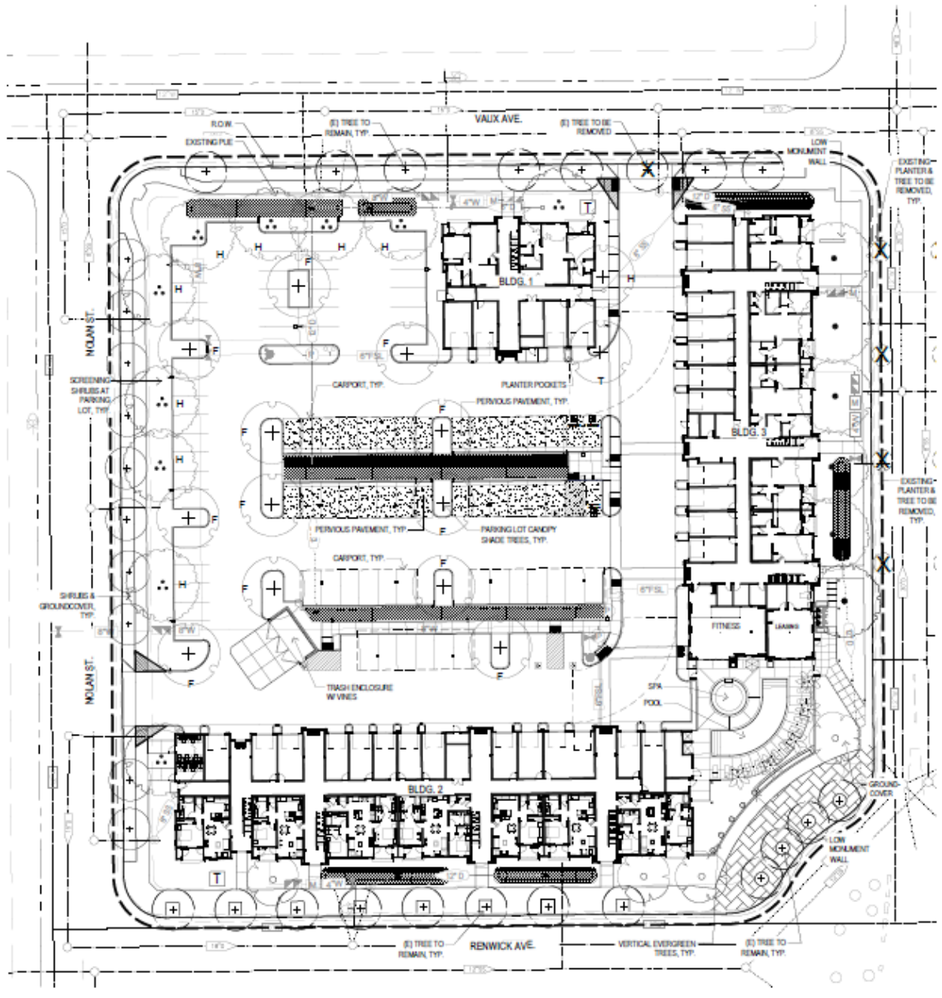
PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	WATER USE	SIZE (H x W)	QUANTITY
	Acer rubrum 'Red Sunset' Red Sunset Maple	24"box	Med	45' X 35'	14
	Arbutus x 'Marina' Arbutus Multi-Trunk	24"box	Low	30' X 25'	4
	Existing Tree	Existing	--	--	19
	Juniperus virginiana 'Skyrocket' Skyrocket Juniper	15 gal	Low	18' X 3'	5
	Platanus x acerifolia London Plane Tree	24"box	Med	30' X 25'	10
	Quercus virginiana Southern Live Oak	24"box	Low	45' X 35'	10
	Ulmus parvifolia 'Drake' Drake Elm	24"box	Med	45' X 35'	6
	Washingtonia filifera California Fan Palm	12' BTH	Med	50' X 15'	5

SHRUBS	BOTANICAL / COMMON NAME	CONT	WATER USE	SIZE (H/W)
	Agave x 'Blue Glow' Blue Glow Agave	5 gal	Low	18" X 24"
	Anigozanthos x 'Bush Ranger' Big Red Kangaroo Paw	5 gal	Low	18" X 18"
	Asparagus densiflorus 'Myers' Myers Asparagus	5 gal	Med	18" X 18"
	Berberis thunbergii 'Orange Rocket' Orange Rocket Berberis	1 gal	Med	5' X 3'
	Copiacrea x 'Tequila Sunrise' Gold Mirror Plant	5 gal	Med	4' X 4'
	Cordyline x 'Electric Pink' Pink Cordyline	5 gal	Low	3' X 3'
	Dianella revoluta 'Baby Bliss' Baby Flax	1 gal	Low	18" X 18"
	Erysimum x 'Bowles' Mauve' Wallflower	1 gal	Low	24" X 18"
	Galvezia speciosa 'Firecracker' Bush Snapdragon	5 gal	Low	3' X 5'
	Gardenia jasminoides 'August Beauty' Gardenia	5 gal	Med	5' X 3'
	Heuchera x 'Electric Lime' Coral Bells	1 gal	Med	4' X 4'
	Liriope spicata 'Big Blue' Creeping Lily Turf	1 gal	Med	12" X 12"
	Mahonia eutybracteata 'Soft Caress' Mahonia Soft Caress	5 gal	Low	3' X 4'
	Nandina domestica 'Gulf Stream' TM Heavenly Bamboo	5 gal	Low	3' X 3'
	Olea europaea 'Little Ollie' TM Little Ollie Olive	5 gal	Low	5' X 5'
	Pittosporum tenuifolium 'Golf Ball' Tawhiwhi	5 gal	Med	3' X 3'
	Pittosporum tobira 'Cream De Mint' TM Cream De Mint Dwarf Mock Orange	5 gal	Med	3' X 3'
	Punica granatum 'Nana' Dwarf Pomegranate	1 gal	Low	3' X 3'
	Rhamnus californica 'Mound San Bruno' California Coffeeberry	5 gal	Low	6' X 6'
	Rosmarinus officinalis 'Tuscan Blue' Tuscan Blue Rosemary	5 gal	Low	6' X 4'
	Salvia microphylla 'Hot Lips' Baby Sage	1 gal	Low	3' X 3'
	Spiraea x bumalda 'Limemound' TM Limemound Spirea	5 gal	Med	3' X 4'

VINES/PALMS	BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	DETAIL
	Pandorea jasminoides Bower Vine	15 gal	Med	--	
	Parthenocissus tricuspidata 'Veitchii' Boston Ivy	15 gal	Med	--	

GROUND COVERS	BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	DETAIL
	Arctostaphylos uva-ursi 'Point Reyes' Kinnikinnick	1 gal	Low	48" o.c.	
	Bouteloua gracilis 'Blonde Ambition' Blue Grama	1 gal	Low	24" o.c.	
	Carex divulsa Berkeley Sedge	1 gal	Low	18" o.c.	
	Lomandra longifolia 'Platinum Beauty' Variegated Dwarf Mat Grass	1 gal	Low	30" o.c.	
	Myoporum parvifolium Trailing Myoporum	1 gal	Low	42" o.c.	



SHADE CALCULATION

Tree Species	Tree Size	Coverage	Qty	Area	Shade Total
Acer rybrum 'Red Sunset'	35'	Full	12	962	11,544
Ulmus parvifolia 'Drake'		Three-Qtrs	1	722	722
		Half	9	481	4,329
		Quarter	0	241	0
				Total	16,595

SHADE TREE LEGEND

SYM	DESCRIPTION
F	FULL SHADE TREE
T	THREE QUARTER SHADE TREE
H	HALF SHADE TREE
Q	QUARTER SHADE TREE

Total Tree Shaded Area Provided	16,595
Total Carport Area (W/ PV) Provide	7,448
Precent of Parking Shaded	52.6%
Total Parking Area	45,735

EVERGREEN TREE CALCULATION

TREE TOTAL:	73
REQUIRED EVERGREEN TREES:	22 (30%)
EVERGREEN TREES PROVIDED:	30 (41%)

24" BOX TREE CALCULATION

TREE TOTAL:	73
REQUIRED 24" BOX TREES:	24 (33%)
24" BOX OR LARGER TREES PROVIDED:	44 (60%)

LANDSCAPE AREA CALCULATION

PROPERTY SIZE NET AREA:	127,482 SF (2.93 ACRES)
REQUIRED LANDSCAPE AREA:	25,496 SF (20%)
PROVIDED LANDSCAPE AREA:	25,502 SF (20%)

0 30 60 90 FT
SCALE: 1" = 30'-0"
N

WATER EFFICIENT LANDSCAPE ORDINANCE:

"I have compiled with the criteria of the Water Efficient Landscape Ordinance and applied such criteria for the efficient use of water in the landscape design plan."

Applicant Signature	License Number	Date
	4836	02.12.2021

LPAS Architecture + Design
KF PROPERTIES
WEST LANDSCAPE PLAN
LAGUNA MAIN APARTMENTS | ELK GROVE, CA
L4

Figure 5
Landscaping Plan – Eastern Parcels

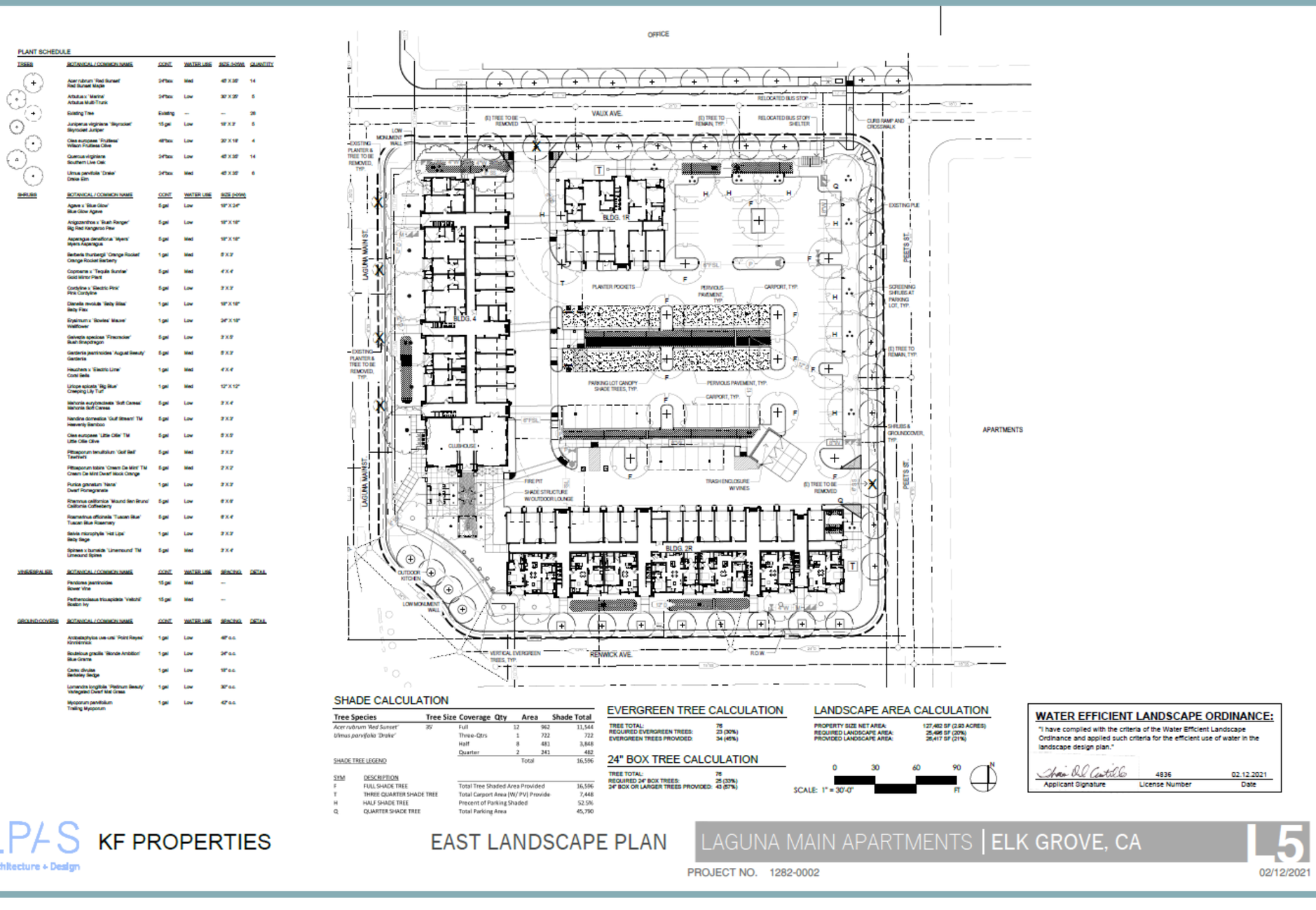


Figure 6
Utility Plan – Western Parcels

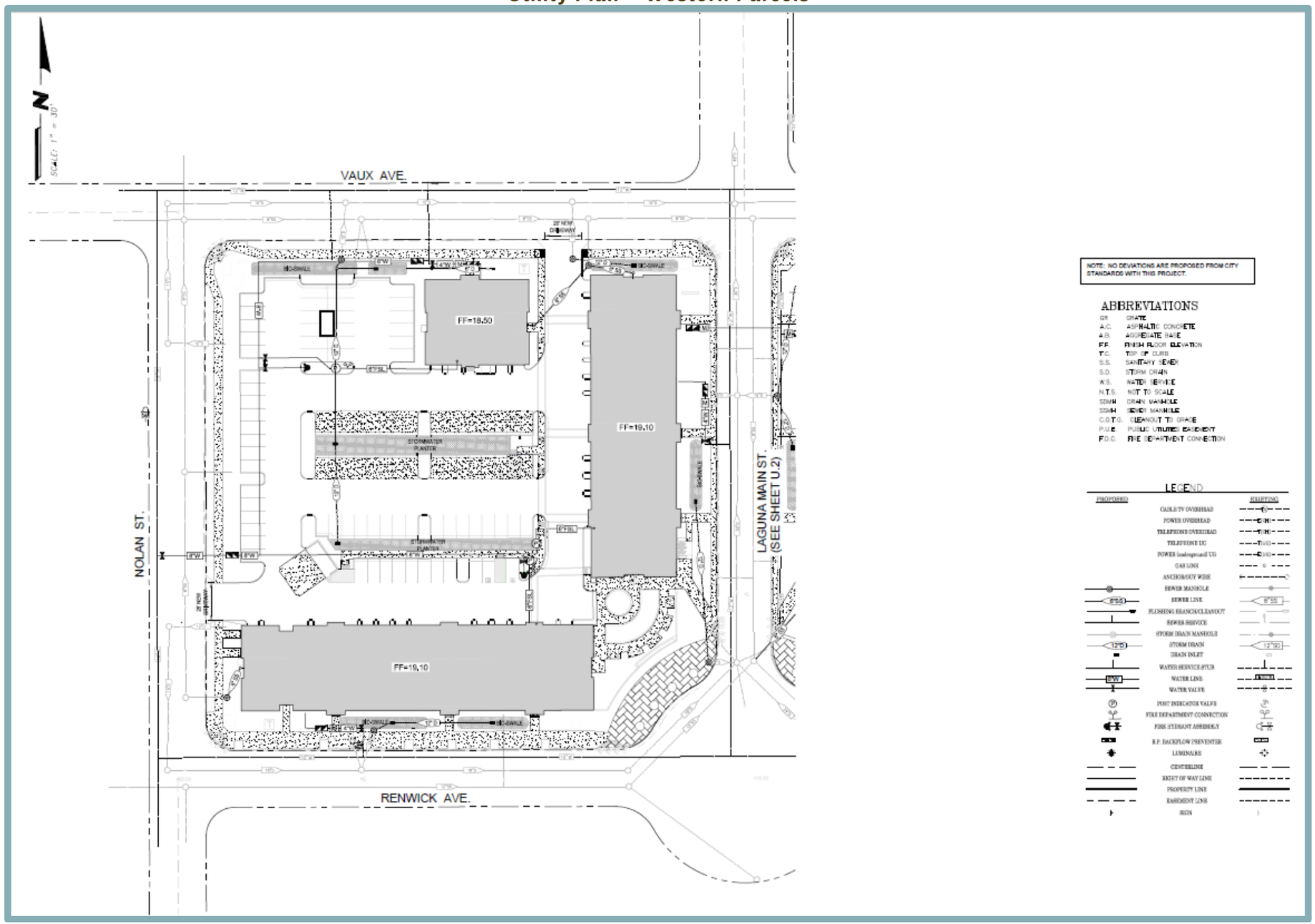


Figure 7
Utility Plan – Eastern Parcels

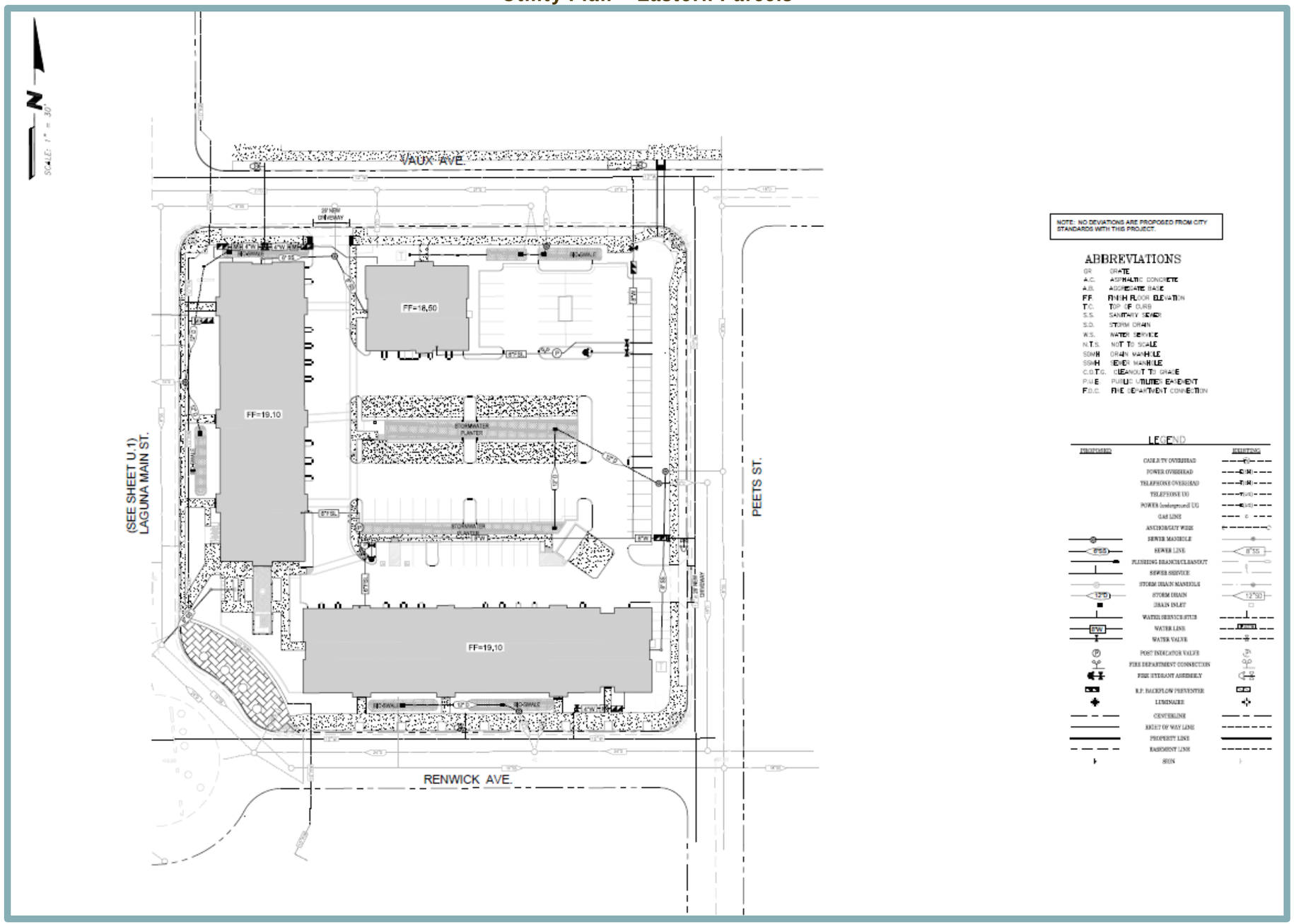


Figure 8
Grading and Drainage Plan – Western Parcels

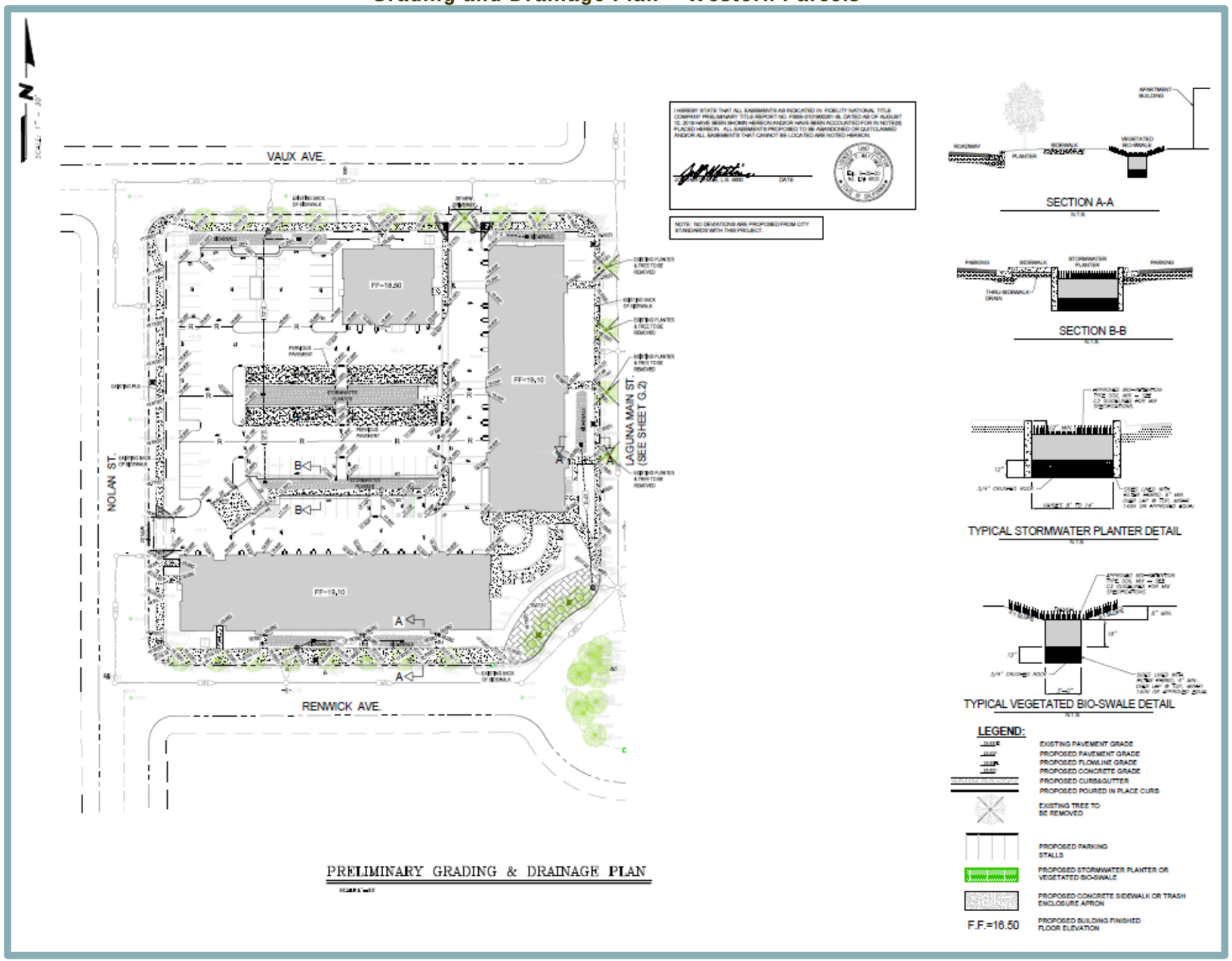
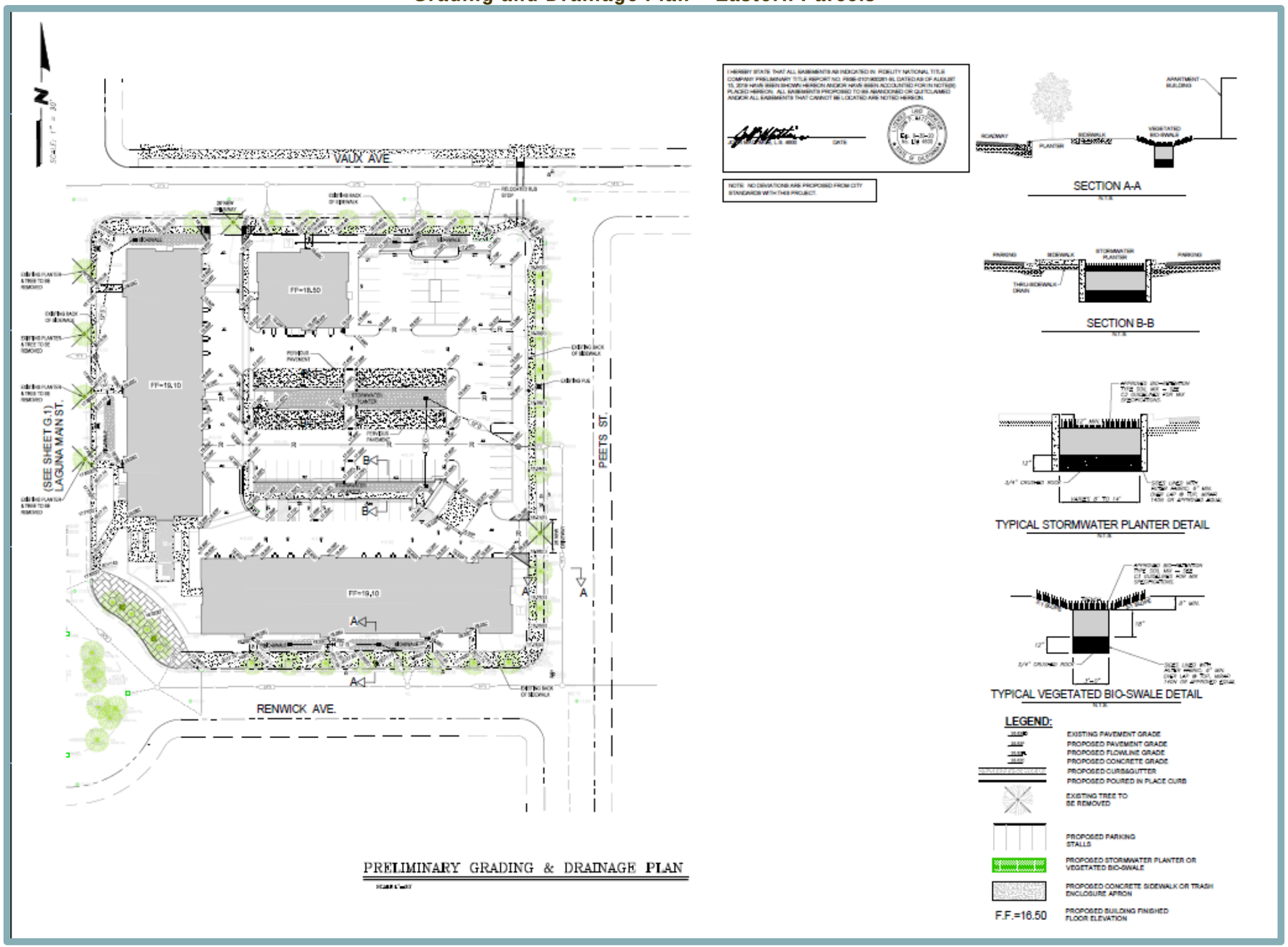


Figure 9
Grading and Drainage Plan – Eastern Parcels



Special Parking Permit

According to Section 23.16.047 of the City's Municipal Code, a Special Parking Permit can be requested for off-street parking reductions exceeding 10 percent of the total required parking when on-street parking is located within a reasonable distance of the proposed project; on-street parking is already permitted at the designated location; the on-street parking is located in a commercial area and not within a single-family residential neighborhood; and where such a reduction is justified without compromising the health, safety, and welfare of the surrounding community. The City would require a total of 293 parking spaces to meet the parking needs of the proposed 148 residential units. However, because the proposed project would only provide 250 spaces, the Project would require a 14.7 percent parking reduction based on 113 available on-street parking spaces located on all sides of the Project parcels, including Vaux Avenue, Laguna Main Street, Renwick Avenue, Nolan Street, and Peets Street.

Major Design Review

Per Section 23.16.080 of the City's Municipal Code, the Project would be subject to Major Design Review by the City. The Project would be reviewed based on the standards set forth in Section 23.16.080. Specifically, the site plan would be analyzed based on elements of design, development location, arrangement of all structures, and design in harmony with surrounding facilities. The purpose of the Major Design Review process is to allow the City to review all development, signs, buildings, structures, and other facilities in order to ensure physical, visual, and functional compatibility between uses and encourage development in keeping with the desired character of the City.

Project Approvals

The Project would require City approval of the following:

- IS/MND and Mitigation Monitoring Reporting Program (MMRP);
- GPA from CC to RMU;
- Rezone from LC to RMU;
- Special Parking Permit; and
- Major Design Review.

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 Project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are Project-specific mitigation measures recommended, as appropriate, as part of the Project. For this checklist, the following designations are used:

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

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

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

No Impact: The Project would not have any impact.

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,b. Examples of typical scenic vistas would 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. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. The City's General Plan does not identify any scenic vistas in the Project area. Thus, the proposed residential development would not have a substantial adverse effect on a scenic vista. In addition, according to the California Scenic Highway Mapping System, the Project site is located approximately three miles east of the nearest State Scenic Highway, State Route (SR) 160.[1] The Project site is not visible from SR 160. The General Plan EIR did not identify any significant impacts related to scenic vistas or State Scenic Highways.

Based on the above, the Project would not have a substantial adverse effect on a scenic vista and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. Thus, a ***less-than-significant*** impact would occur.

c. Distinguishing between public and private views is important when evaluating changes to visual character or quality. Private views are views seen from privately-owned land and are typically associated with individual viewers, including views from private residences. Public views are experienced by the collective public, and include views of significant landscape features and along scenic roads. According to CEQA (Pub. Resources Code, § 21000 et seq.) case law, only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720 [3 Cal. Rptr.2d 488], the court determined that "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: '[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.'" Therefore, the focus in this section is on potential impacts to public views. Sensitive public viewers in the surrounding area include

[1] 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 September 2020.

motorists, bicyclists, and pedestrians travelling along the surrounding roadways, including Vaux Avenue to the north, Renwick Avenue to the south, Peets Street to the east, Nolan Street to the west, and in the Project vicinity.

The Project would change the visual character and quality of the site from a vacant lot to a residential development with 148 apartments and associated improvements, which includes landscaping, recreational areas, and utility infrastructure improvements. However, the visual character of the Project would be consistent with existing surrounding development and supplemented by landscaping improvements. All architectural elements of the Project would be designed in compliance with the applicable sections of the City's Design Guidelines, and the existing landscaping trees along the project frontages would be retained. For example, the proposed building architecture would include fiber cement panel with a wood grain finish, flat concrete roof tile shape and color, metal awning detailing, recessed gable end detailing, modern exterior lighting, and decorative accent tiles and vents (see Figure 10). The Western Parcel would include 32 new evergreen trees and 44 new 24-inch box trees, while the Eastern Parcel would include 35 new evergreen trees, and 43 new 24-inch box trees (see Figure 11). Landscaping trees would shade a minimum of 52.5 percent of the parking areas in both parcels. Landscaping buffers would also include the planting of drought-tolerant shrubs and groundcover along the project site perimeter, as well as a low monument wall. The landscaped buffers and monument wall would help to screen public views of the proposed buildings from the surrounding roadways.

The Project site is located in an urbanized area, and the Project would essentially serve as an extension of the existing residential development in the Project vicinity. The proposed multi-family residences would include lot sizes similar to the multi-family residential developments to the west and east of the site. All components of the Project would be subject to the City's design review process pursuant to Section 23.16.080 of the City's Municipal Code, which is intended to encourage development in keeping with the desired character of the City and to ensure physical, visual, and functional compatibility between uses. Required findings for a design review permit are as follows:

1. The Project is consistent with the objectives of the General Plan, complies with applicable zoning regulations, specific plan provisions, special planning area provisions, Citywide and/or other applicable design guidelines, and improvement standards adopted by the City;
2. The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community;
3. The architecture, including the character, scale and quality of the design, relationship with the site and other buildings, building materials, colors, screening of exterior appurtenances, exterior lighting and signing and similar elements establishes a clear design concept and is compatible with the character of buildings on adjoining and nearby properties;
4. The Project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation; and
5. For residential subdivision design review applications, the residential subdivision is well integrated with the City's street network, creates unique neighborhood environments, reflects traditional architectural styles, and establishes a pedestrian friendly environment.

Figure 10
Architectural Rendering

Figure 11
Plant Images

ACER RUBRUM 'RED SUNSET'

ARBUTUS X 'MARINA'

JUNIPERUS 'SKYROCKET'

OLEA EUROPAEA 'FRUITLESS'

PLATANUS X ACERIFOLIA

QUERCUS VIRGINIANA

ULMUS 'DRAKE'

WASHINGTONIA FILIFERA

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	WATER USE	SIZE (H/W)
	Acer rubrum 'Red Sunset' Red Sunset Maple	24"box	Med	45' X 35'
	Arbutus x 'Marina' Arbutus Multi-Trunk	24"box	Low	30' X 25'
	Existing Tree	Existing	—	—
	Juniperus virginiana 'Skyrocket' Skyrocket Juniper	15 gal	Low	15' X 3'
	Platanus x acerifolia London Plane Tree	24"box	Med	30' X 30'
	Quercus virginiana Southern Live Oak	24"box	Low	45' X 55'
	Ulmus parvifolia 'Drake' Drake Elm	24"box	Med	45' X 55'
	Washingtonia filifera California Fan Palm	12' BTH	Med	50' X 15'

SHRUBS	BOTANICAL / COMMON NAME	CONT	WATER USE	SIZE (H/W)
	Agave x 'Blue Glow' Blue Glow Agave	5 gal	Low	18" X 24"
	Anigozanthos x 'Bush Ranger' Big Red Kangaroo Paw	5 gal	Low	18" X 18"
	Asparagus densiflorus 'Myers' Myers Asparagus	5 gal	Med	18" X 18"
	Berberis thunbergii 'Orange Rocket' Orange Rocket Barberry	1 gal	Med	5' X 2'
	Coprosma x 'Tequila Sunrise' Gold Mirror Plant	5 gal	Med	4' X 4'
	Cordyline x 'Electric Pink' Pink Cordyline	5 gal	Low	3' X 3'
	Daniella tevoluta 'Baby Blue' Baby Flax	1 gal	Low	18" X 18"
	Erysimum x 'Bowles' Mauve' Wallflower	1 gal	Low	24" X 18"
	Galvezia speciosa 'Firecracker' Bush Snapdragon	5 gal	Low	3' X 5'
	Gardenia jasminoides 'August Beauty' Gardenia	5 gal	Med	5' X 3'
	Heuchera x 'Electric Lime' Coral Bells	1 gal	Med	4' X 4'
	Liriope spicata 'Big Blue' Creeping Lily Turf	1 gal	Med	12" X 12"
	Mahonia eurybracteata 'Soft Caress' Mahonia Soft Caress	5 gal	Low	3' X 4'
	Nandina domestica 'Gulf Stream' TM Heavenly Bamboo	5 gal	Low	3' X 3'
	Olea europaea 'Little Ollie' TM Little Ollie Olive	5 gal	Low	5' X 5'
	Pittosporum tenuifolium 'Golf Ball' Tawhiwhi	5 gal	Med	3' X 3'
	Pittosporum tobira 'Cream De Mint' TM Cream De Mint Dwarf Mock Orange	5 gal	Med	3' X 3'
	Punica granatum 'Nana' Dwarf Pomegranate	1 gal	Low	3' X 3'
	Rhamnus californica 'Mound San Bruno' California Coffeeberry	5 gal	Low	6' X 6'
	Rosmarinus officinalis 'Tuscan Blue' Tuscan Blue Rosemary	5 gal	Low	6' X 4'
	Salvia microphylla 'Hot Lips' Baby Sage	1 gal	Low	3' X 3'
	Spiraea x bumalda 'Limemound' TM Limemound Spirea	5 gal	Med	3' X 4'

VINES/ESPALIER	BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	DETAIL
	Pandorea jasminoides Bower Vine	15 gal	Med	—	
	Parthenocissus tricuspidata 'Veitchii' Boston Ivy	15 gal	Med	—	

GROUND COVERS	BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	DETAIL
	Arctostaphylos uva-ursi 'Point Reyes' Kinnikinnick	1 gal	Low	48" o.c.	
	Bouteloua gracilis 'Blonde Ambition' Blue Grama	1 gal	Low	24" o.c.	
	Carex divulsa Berkeley Sedge	1 gal	Low	18" o.c.	
	Lomandra longifolia 'Platinum Beauty' Variegated Dwarf Mat Grass	1 gal	Low	30" o.c.	
	Myoporum parvifolium Trailing Myoporum	1 gal	Low	42" o.c.	

BOUTELOUA 'BLONDE AMBITION'

CAREX DIVULSA

LOMANDRA 'PLATINUM BLONDE'

MYOPORUM PARVIFOLIUM

ANIGOZANTHOS X 'BUSH RANGER'

ASPARAGUS 'MYERS'

DIANELLA 'BABY BLISS'

GALVEZIA 'FIRECRACKER'

GARDENIA 'AUGUST BEAUTY'

MAHONIA 'SOFT CARESS'

PITTOSPORUM 'GOLF BALL'

PUNICA GRANATUM 'NANA'

ROSMARINUS 'TUSCAN BLUE'

Although the project would require a rezone from LC to RMU and a GPA from CC to RMU, the proposed development would be consistent with the existing residential development to the east and west of the site. In addition, architectural design and landscaping improvements would be included to improve the visual quality of the site as viewed from the surrounding roadways in the project vicinity. The Project would retain the existing sidewalks which surround the project site and would not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation. As such, the Project would be consistent with surrounding urban development, would not conflict with applicable zoning and other regulations governing scenic quality, and would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Thus, a ***less-than-significant*** impact would occur.

d. The Project site is currently undeveloped and, thus, does not contain any existing sources of light or glare. Implementation of the Project would develop the site with residential buildings, and, thus, would introduce new sources of light and glare where none currently exists. Potential sources of light and glare associated with the Project would include interior light spilling through windows, exterior lighting on buildings, street lighting on the internal street system and parking areas, and light reflected off windows.

While the site does not currently contain sources of light or glare, the site is bordered by existing development that currently generates light and glare in the area. Furthermore, the Project would be subject to compliance with all applicable regulations included in Chapter 23.56, Lighting, of the City's Municipal Code. Per Section 23.56.030(B), the Project applicant would be required to submit a point-by-point photometric calculation listing the number, type, height, and level of illumination of all outdoor lighting fixtures in conjunction with the development permit application and prior to issuance of a building permit or site improvement plans. The photometric plan would be required to demonstrate compliance with the following City standards:

1. Parking lots, driveways, trash enclosures/areas, public phones, and group mailboxes shall be illuminated with a minimum maintained one (1 fc) foot-candle of light and an average not to exceed four (4 fc) foot-candles of light.
2. Pedestrian walkways shall be illuminated with a minimum maintained one-half (0.5 fc) foot-candle of light and an average not to exceed two (2 fc) foot-candles of light.
3. Exterior doors of nonresidential structures shall be illuminated during the hours of darkness with a minimum maintained one (1 fc) foot-candle of light, measured within a five (5' 0") foot radius on each side of the door at ground level.
4. In order to minimize light trespass on abutting residential, agricultural-residential, and agricultural property, illumination measured at the nearest residential structure or rear yard setback line shall not exceed the moon's potential ambient illumination of one-tenth (0.1 fc) foot-candle.

The Preliminary Lighting Plan prepared for the Project is consistent with the above standards; for example, the average foot-candle for parking lots and driveways within the project site would be approximately 2.9 fc (see Figure 12 and Figure 13). The maximum illumination measurement at the edge of the parking areas closest to the residential uses adjacent to the project site would be approximately 3.8-fc.

Figure 12
Preliminary Lighting Plan – Western Parcels

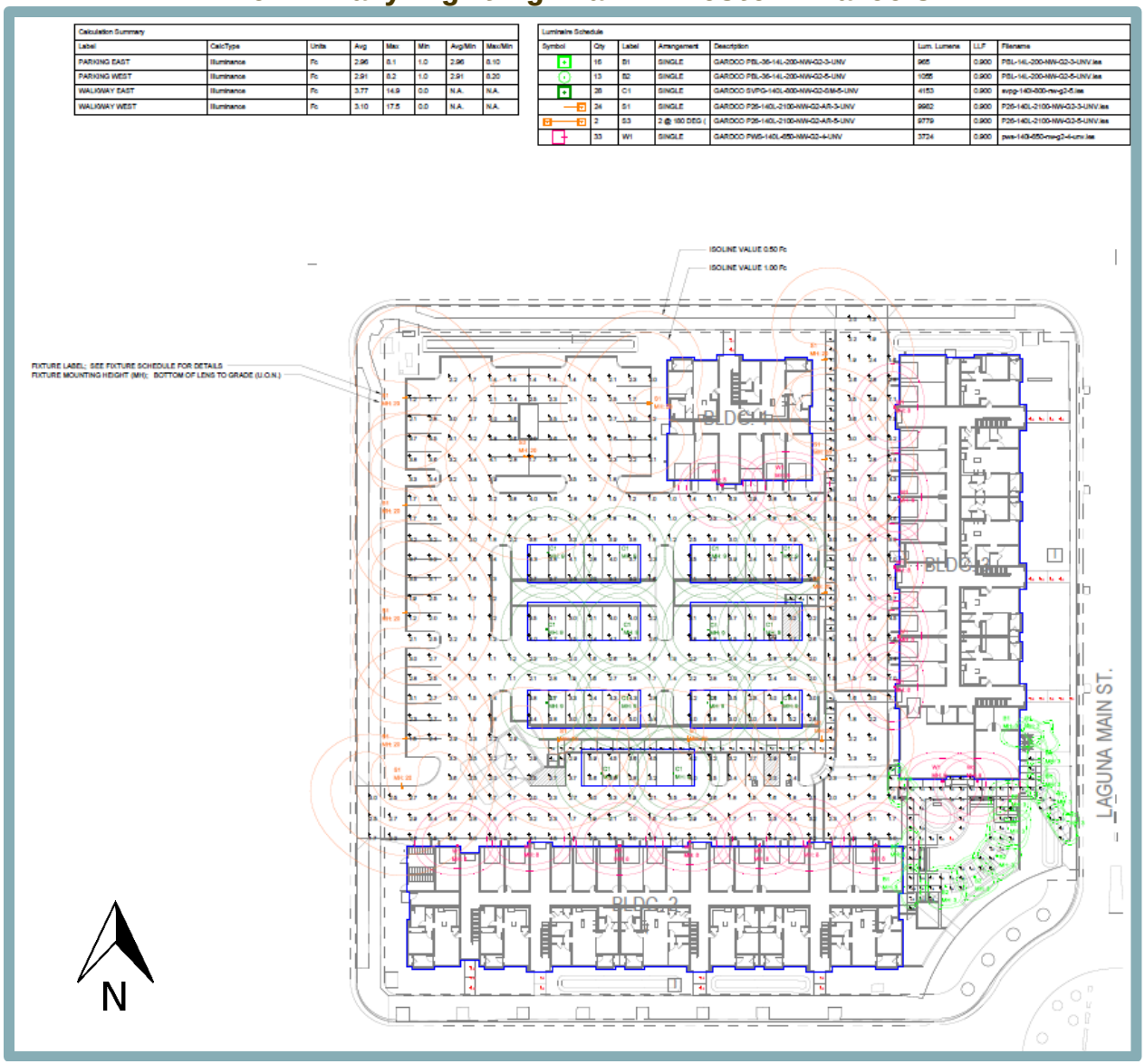
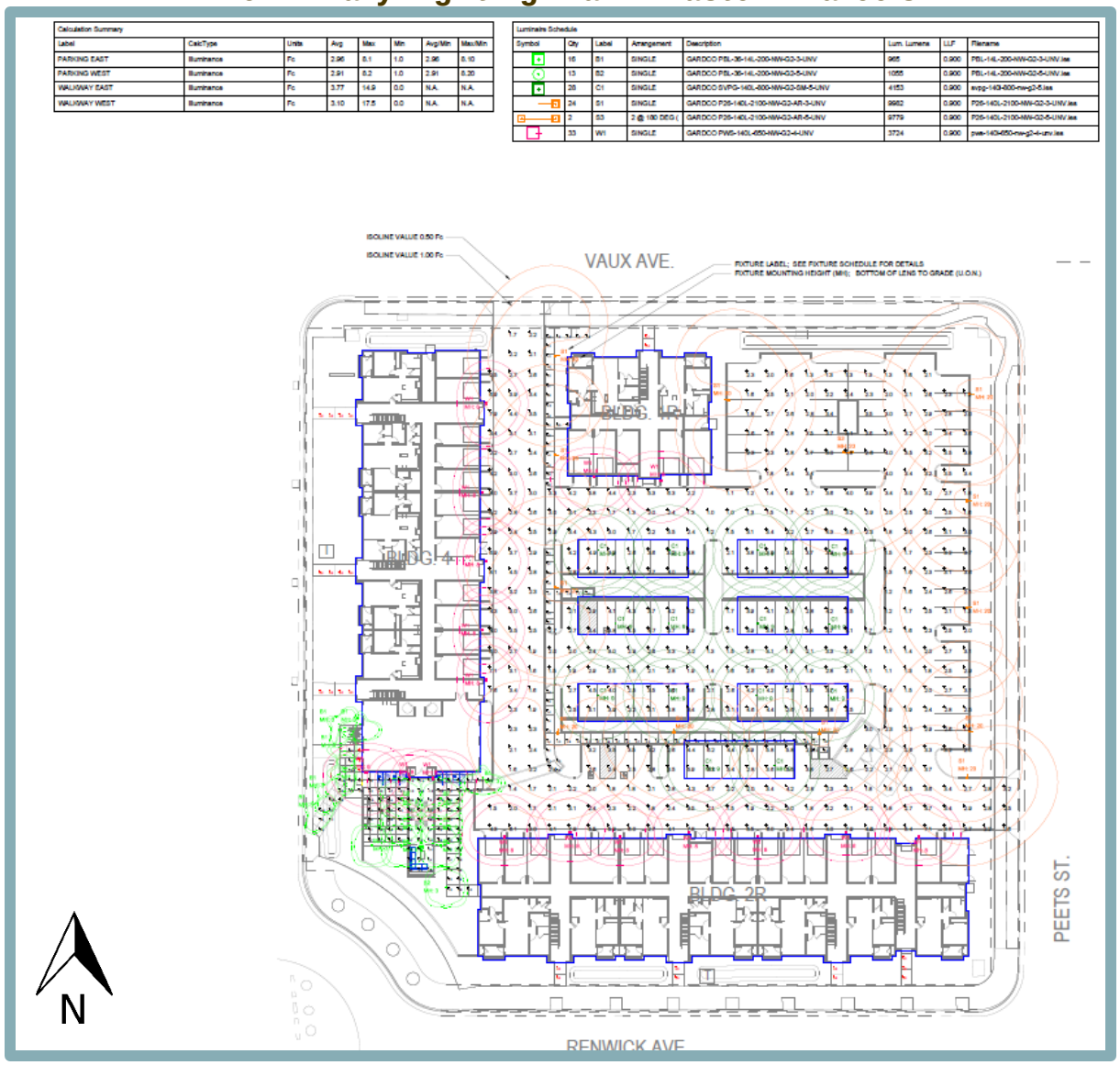


Figure 13
Preliminary Lighting Plan – Eastern Parcels



Considering that landscaping surrounding the parking areas and apartment structures would screen exterior lighting from spilling onto the nearest residential uses located approximately 75 feet from the project site, illumination from the proposed project is unlikely to exceed the 0.1-fc threshold for light trespassing onto abutting residential uses. Furthermore, the Project would be required to comply with the maximum height restrictions for freestanding and exterior light fixtures specified by Section 23.56.030(C) of the Municipal Code.

Given the consistency of the Project with surrounding residential development, compliance with Chapter 23.56 of the City's Municipal Code, and the added assurance of the design review process, implementation of the Project would result in a ***less-than-significant*** impact with respect to creating a new source of substantial light or glare that 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. The Project site is currently vacant and undeveloped and consists primarily of ruderal grasses, which are regularly mowed. Currently, the site is designated as "Urban and Built-Up Land" per the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP).[2] The project site does not contain, and is not located adjacent to, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. In addition, the site is not zoned or designated in the General Plan for agriculture uses, and such uses would be incompatible with surrounding land uses in the area.

Given the FMMP designations for the site, development of the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or otherwise result in the loss of Farmland to non-agricultural use. Therefore, the Project would have a ***less-than-significant*** impact.

b. The Project site is not under a Williamson Act contract and is not designated or zoned for agricultural uses. Therefore, buildout of the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and ***no impact*** would occur.

c,d. The Project area 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]). Therefore, the Project would have ***no impact*** with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

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

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. The City of Elk Grove is located within Sacramento County, which is within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Federal and State ambient air quality standards (AAQS) have been established for six common air pollutants, known as criteria pollutants, due to the potential for pollutants to be detrimental to human health and the environment. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides (NO_X), and lead. At the federal level, Sacramento County is designated as severe nonattainment for the 8-hour ozone AAQS, nonattainment for the 24-hour $PM_{2.5}$ AAQS, and attainment or unclassified for all other criteria pollutant AAQS. At the State level, the area is designated as a serious nonattainment area for the 1-hour ozone AAQS, nonattainment for the 8-hour ozone AAQS, nonattainment for the PM_{10} and $PM_{2.5}$ AAQS, and attainment or unclassified for all other State AAQS.

Due to the nonattainment designations, SMAQMD, along with the other air districts in the SVAB region, is required to develop plans to attain the federal and State AAQS for ozone and particulate matter. The attainment plans currently in effect for the SVAB are the *2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2013 Ozone Attainment Plan), *$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area* ($PM_{2.5}$ Implementation/Maintenance Plan), and the 1991 Air Quality Attainment Plan (AQAP), including triennial reports. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals.

Nearly all development projects in the Sacramento region have the potential to generate air pollutants that may increase the difficultly of attaining federal and State AAQS. Therefore, evaluation of air quality impacts is required. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants for which the area is designated nonattainment, SMAQMD has developed the Guide to Air Quality Assessment in Sacramento County (SMAQMD Guide), which includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under

nonattainment for ozone.[3] The SMAQMD's recommended thresholds of significance for the ozone precursors reactive organic compounds (ROG) and NO_X, which are expressed in pounds per day (lbs/day) and tons per year (tons/yr), are presented in Table 1. As shown in the table, SMAQMD has construction and operational thresholds of significance for PM_{10} and $PM_{2.5}$ expressed in both pounds per day (lbs/day) and tons per year (tons/yr). The construction and operational thresholds for PM_{10} and $PM_{2.5}$ only apply to those projects that have implemented all applicable Best Available Control Technologies (BACTs) and Best Management Practices (BMPs).

Table 1
SMAQMD Thresholds of Significance

Pollutant	Construction Thresholds	Operational Thresholds
ROG	N/A	65 lbs/day
NO_X	85 lbs/day	65 lbs/day
PM_{10}	80 lbs/day 14.6 tons/yr	80 lbs/day 14.6 tons/yr
$PM_{2.5}$	82 lbs/day 15 tons/yr	82 lbs/day 15 tons/yr

Source: SMAQMD, CEQA Guidelines, April 2020.

The Project's construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 software – 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, trip generation rates, vehicle mix, trip length, average speed, compliance with the California Building Standards Code (CBSC), etc. The emissions intensity factor for electricity consumed at the Project site was updated to reflect Sacramento Municipal Utility District's (SMUD's) progress towards achieving the State's Renewable Portfolio Standards (RPS). Where Project-specific data was available, such data was input into the model (e.g., construction phases and timing, inherent site or Project design features, compliance with applicable regulations, etc.). Accordingly, the Project's modeling assumed the following:

- Construction and infrastructure improvements are anticipated to commence in May of 2021;
- Construction would occur over an approximately 1.5-year period;
- Off-site improvements would be limited to connections to existing utility infrastructure within the paved rights-of-way along the Project frontages;
- Trip generation rates were adjusted based on the Traffic Report prepared for the Project; and
- The Project would comply with all applicable provisions of the Model Water Efficiency Landscape Ordinance (MWELO), 2019 CALGreen Code, and 2019 CBSC, including the use of renewable energy to meet 100 percent of Project electricity demand through on-site solar, off-site solar energy from Sacramento Metro Utility District's (SMUD) solar farm Wildflower, or a combination of both.

[3] Sacramento Metropolitan Air Quality Management District. Guide to Air Quality Assessment in Sacramento County. May 2018. Available at: http://www.airquality.org/ceqa/ceqaguideupdate.shtml. Accessed September 2020.

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

Construction Emissions

During construction of the Project, various types of equipment and vehicles would temporarily operate on the Project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction worker commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the Project would generate air pollutant emissions intermittently within the site and vicinity, until all construction has been completed, construction is a potential concern because the Project is in a non-attainment area for ozone, PM_{10}, and $PM_{2.5}$.

The Project is required to comply with all SMAQMD rules and regulations for construction, which would be noted on construction plans. The applicable rules and regulations would include, but would not be limited to, the following:

- Rule 403 related to Fugitive Dust;
- Rule 404 Related to Particulate Matter;
- Rule 407 related to Open Burning;
- Rule 442 related to Architectural Coatings;
- Rule 453 related to Cutback and Emulsified Asphalt Paving Materials; and
- Rule 460 related to Adhesives and Sealants.

To apply the construction thresholds presented in Table 1, Projects must implement all feasible SMAQMD BACTs and BMPs related to dust control. The control of fugitive dust during construction is required by SMAQMD Rule 403, and enforced by SMAQMD staff. The BMPs for dust control include the following:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads;
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph);
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections

2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site;
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html; and
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Compliance with the foregoing measures is required per Rule 403, and Project construction is assumed to include compliance with the foregoing measures. Consequently, the Project PM emissions are assessed in comparison to the thresholds presented in Table 1 above.

Table 2 below presents the estimated construction-related emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed Project in comparison with the SMAQMD thresholds of significance as described above.

Table 2
Maximum Unmitigated Construction Emissions

Pollutant	Project Emissions	Construction Threshold	Exceeds Threshold?
ROG	12.00 lbs/day	-	**NO**
NO_X	40.54 lbs/day	85 lbs/day	**NO**
PM_{10}	20.25 lbs/day and 0.27 tons/yr	80 lbs/day and 14.6 tons/yr	**NO**
$PM_{2.5}$	11.85 lbs/day and 0.15 tons/yr	82 lbs/day and 15 tons/yr	**NO**

Source: CalEEMod, December 2020 (see Appendix A).

As shown in Table 2, the Project's maximum unmitigated construction-related emissions would be below the applicable thresholds of significance. Therefore, construction activities associated with development of the Project would not substantially contribute to the SVAB's non-attainment status for ozone or PM. Accordingly, construction of the Project would not violate an air quality standard or contribute to an existing or projected air quality violation, and a less-than-significant impact would occur associated with construction.

Operational Emissions

Operational emissions of ROG, NO_X, and PM would be generated by the Project from both mobile and stationary sources. Day-to-day activities, such as the future resident vehicle trips to and from the Project site, would make up the majority of the mobile emissions. Emissions would also occur from area sources, such as landscape maintenance equipment exhaust.

The estimated operational emissions for the Project are presented below in Table 3. It should be noted that the Project would not involve installation or operation of any pieces of equipment that would require implementation of SMAQMD's BACTs; therefore, the Project would be subject to SMAQMD's mass emissions thresholds for PM_{10} and $PM_{2.5}$.

As Table 3 indicates, the Project's maximum unmitigated operational emissions would be below the applicable thresholds of significance. Therefore, operations associated with development of the proposed Project would not substantially contribute to the SVAB's

non-attainment status for ozone or PM_{10}, and a less-than-significant impact would occur associated with operations.

Table 3
Maximum Unmitigated Operational Emissions

Pollutant	Project Emissions	Operational Threshold	Exceeds Threshold?
ROG	5.52 lbs/day	65 lbs/day	**NO**
NO_X	5.14 lbs/day	65 lbs/day	**NO**
PM_{10}	4.18 lbs/day and 0.73 tons/yr	80 lbs/day and 14.6 tons/yr	**NO**
$PM_{2.5}$	1.21 lbs/day and 0.21 tons/yr	82 lbs/day and 15 tons/yr	**NO**

Source: CalEEMod, December 2020 (see Appendix A).

Cumulative Emissions

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The non-attainment status of regional pollutants, including ozone and PM, is a result of past and present development and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

Adopted SMAQMD 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 non-attainment, consistent with applicable air quality plans. As future attainment of AAQS is a function of successful implementation of SMAQMD's planning efforts, according to the SMAQMD Guide, by exceeding the SMAQMD's project-level thresholds for construction or operational emissions, a project could contribute to the region's non-attainment status for ozone and PM emissions and could be considered to conflict with or obstruct implementation of the SMAQMD's air quality planning efforts.

As discussed above, the Project would result in construction and operational emissions below all applicable SMAQMD thresholds of significance for criteria pollutants. Therefore, the Project would not be considered to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment, and impacts would be considered less than significant.

Conclusion

Because the Project would not result in construction-related or operational emissions of criteria air pollutants in excess of SMAQMD's thresholds of significance, the Project would not be considered to conflict with or obstruct the implementation of any applicable air quality plans. In addition, the Project would not result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is non-attainment under an applicable AAQS. Therefore, 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 to the Western Parcels would be the multi-family residences located approximately 75 feet to the west, across Nolan Street. The nearest existing sensitive receptors to the Eastern Parcels would be the multi-family residences located approximately 75 feet to the east, across Peets Street, and the KinderCare facility located approximately 75 feet to the south, across Renwick Avenue. The major pollutant concentrations of concern are toxic air contaminant (TAC) emissions, which are addressed in further detail below. In addition, a discussion of health effects related to criteria pollutants is provided. Issues related to odors are discussed under question 'd' below.

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 Project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. As such, the Project would not generate any substantial pollutant concentrations during operations. However, 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. Construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the Project. Specifically, as noted above, construction would occur over an approximately 1.5-year period. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater) and, therefore, construction of the Project is not anticipated to result in any adverse health risks for nearby receptors.

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. The In-Use Off-Road Diesel Vehicle Regulation includes the following standards:

- Imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled;
- Restricts the adding of older vehicles into fleets; and

- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits).

In addition, construction equipment would operate intermittently throughout the day and only on portions of the site at a time, and construction activity occurring adjacent to existing residential uses would be limited to the hours of 7:00 AM to 7:00 PM per Section 6.32.100 of the City's Municipal Code.[4] 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 permanent or substantially extended period of time would be low. Therefore, construction of the Project would not be expected to expose nearby sensitive receptors to substantial pollutant concentrations.

Criteria Pollutants

Recent rulings from the California Supreme Court (including the *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 case regarding the proposed Friant Ranch Project) have underscored the need for analysis of potential health impacts resulting from the emission of criteria pollutants during operations of proposed projects. Although analysis of project-level health risks related to the emission of TACs has long been practiced under CEQA, the analysis of health impacts due to individual projects resulting from emissions of criteria pollutants is a relatively new field. SMAQMD released the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (Guidance) for the analysis of criteria emissions in areas within the District's jurisdiction.[5] The Guidance represents SMAQMD's effort to develop a methodology that provides a consistent, reliable, and meaningful analysis in response to the Supreme Court's direction on correlating health impacts to a project's emissions.

The Guidance was prepared by conducting regional photochemical modeling, and relies on the USEPA's Benefits Mapping and Analysis Program (BenMAP) to assess health impacts from ozone and $PM_{2.5}$. SMAQMD has prepared two tools that are intended for use in analyzing health risks from criteria pollutants. Small projects with criteria pollutant emissions close to or below SMAQMD's adopted thresholds of significance may use the Minor Project Health Effect Screening Tool, while larger projects with emissions between two and six times greater than SMAQMD's adopted thresholds may use the Strategic Area Project Health Screening Tool. Considering the proposed Project would result in emissions lower than the SMAQMD's thresholds of significance, the Project would qualify for use of the Minor Project Health Effects Screening Tool.

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4 Section 6.32.100 states that "when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in progress be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 7:00 P.M. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner".

5 Sacramento Metropolitan Air Quality Management District. *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*. October 2020.

It is important to note, however, that the Minor Project Health Effects Screening Tool applies the assumption that all small projects result in emissions of criteria pollutants equal to the SMAQMD thresholds of significance. As shown in Table 3, the Project would result in operational emissions well below the SMAQMD thresholds of significance and, thus, the health impacts calculated for the Project using in the Minor Project Health Effects Screening Tool are highly conservative. The Project's actual health impacts associated with criteria pollutant emissions would be expected to be much less than what is presented herein based on the aforementioned SMAQMD tool. Results from the Minor Project Health Effects Screening Tool are shown in Table 4 below.

As shown in the table, according to the Minor Project Health Effects Screening Tool, which is based on the highly conservative assumption that the Project would emit criteria pollutants at levels equal to the SMAQMD thresholds of significance, the proposed Project could result in 1.9 premature deaths per year due to the Project's $PM_{2.5}$ emissions and 0.04 premature deaths per year due to the Project's ozone emissions. Such numbers represent a very small increase over the background incidence of premature deaths due to $PM_{2.5}$ and ozone concentrations (0.0042 percent and 0.0001 percent, respectively). In addition, according to the Minor Project Health Effects Screening Tool, $PM_{2.5}$ emissions from the proposed Project could result in 0.87 asthma-related emergency room visits, and ozone emissions from the proposed Project could result in 0.97 asthma-related emergency room visits. Such numbers represent a minute increase over the background level of asthma-related emergency room visits (0.0047 percent and 0.0112 percent, respectively). As noted above, because the proposed Project's emissions would be substantially below the SMAQMD thresholds of significance, the Project's actual health impacts associated with criteria pollutant emissions would be much lower than what is presented above.

Furthermore, the SMAQMD criteria pollutant thresholds of significance were established with consideration given to the health-based air quality standards established by the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), and are designed to aid the district in achieving attainment of the NAAQS and CAAQS. The thresholds of significance represent emissions levels that would ensure that project-specific emissions would not inhibit attainment of regional NAAQS and CAAQS and, therefore, would not adversely affect public health. Considering that implementation of the proposed Project would not result in emissions of criteria pollutants that would exceed the SMAQMD standards, the proposed Project would not inhibit attainment of regional NAAQS and CAAQS and would not result in adverse health impacts related to the emission of criteria pollutants.

The results of the Minor Project Health Effects Screening Tool have been presented for informational purposes only. Overall, because the Project would be relatively small compared to the regional growth and development that drives health impacts from criteria pollutants, and the anticipated air quality emissions would fall below all applicable thresholds of significance, potential health impacts related to criteria air pollutants would be less than significant.

Table 4
Health Effects from Proposed Project

Health Endpoint	Age Range[1]	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2] (Mean)	Percent of Background Health Incidences Across the 5-Air-District Region[3] (%)	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
Respiratory $PM_{2.5}$				
Emergency Room Visits, Asthma	0-99	0.87	0.0047	18,419
Hospital Admissions, Asthma	0-64	0.06	0.0031	1,846
Hospital Admissions, All Respiratory	65-99	0.28	0.0014	19,644
Cardiovascular $PM_{2.5}$				
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65-99	0.15	0.0006	24,037
Acute Myocardial Infarction, Nonfatal	18-24	0.00	0.0019	4
Acute Myocardial Infarction, Nonfatal	25-44	0.01	0.0021	308
Acute Myocardial Infarction, Nonfatal	45-54	0.02	0.0023	741
Acute Myocardial Infarction, Nonfatal	55-64	0.03	0.0022	1,239
Acute Myocardial Infarction, Nonfatal	65-99	0.10	0.0020	5,052
Mortality $PM_{2.5}$				
Mortality, All Cause	30-99	1.9	0.0042	44,766
Respiratory Ozone				
Hospital Admissions, All Respiratory	65-99	0.07	0.0003	19,644
Emergency Room Visits, Asthma	0-17	0.38	0.0065	5,859
Emergency Room Visits, Asthma	18-99	0.59	0.0047	12,560
Mortality Ozone				
Mortality, Non-Accidental	0-99	0.04	0.0001	30,386

[1] Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

[2] Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the 5-Air-District Region.

[3] The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

[4] The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.

Source: SMAQMD, Minor Project Health Effects Screening Tool. June 2020 (see Appendix B).

Conclusion

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

d. Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections "a" through "c" above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. 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, it is difficult to quantitatively determine the presence of a significant odor impact. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The 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, as discussed above, construction activities would be temporary, and operation of construction equipment adjacent to existing residential uses would be restricted to the hours of 7:00 AM to 7:00 PM every day, unless unforeseen conditions occur, per Section 6.32.100 of the City's Municipal Code. Project construction would also be required to comply with all applicable SMAQMD 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.

Dust

As noted previously, construction of the proposed Project is required to comply with all applicable SMAQMD rules and regulations, including, but not limited to, Rule 403 (Fugitive Dust) and Rule 404 (Particulate Matter). Furthermore, all projects within Sacramento County are required to implement the SMAQMD's Basic Construction Emission Control Practices (BCECP). Compliance with SMAQMD rules and regulations and BCECP would help to ensure that dust is minimized during Project construction. Following Project construction, vehicles operating within the Project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions. Thus, Project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

For the reasons discussed above, construction and operation of the Project would not result in emissions, such as those leading to odors and/or dust, that would adversely affect a substantial number of people, and a ***less-than-significant*** impact would occur.

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

a. Currently, the Project site is vacant and undeveloped. The site consists primarily of ruderal grasses, which are regularly disked. The site does not contain wetland features or waterways; however, existing trees are planted along the sidewalks which border both parcels. The site consists primarily of relatively flat terrain approximately 20 feet above mean sea level (msl).

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. 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.

In September of 2020, a query was conducted for published records of special-status plant and wildlife species for the Florin USGS 7.5" quadrangle, in which the Project site occurs,

using the California Natural Diversity Data Base (CNDDB) Rarefind 5 application. The intent of the database review was to identify documented occurrences of special-status species in the vicinity of the Project area, to determine their locations relative to the Project site. The results of the CNDDB search are discussed below.

Special-Status Plants

Based on the results of the CNDDB search, at total of 24 special-status plant species have been recorded within five miles of the site. Of the 24 species, all are considered absent from or unlikely to occur on the site due to a lack of suitable habitat, such as vernal pools and serpentine or alkaline soils. In addition, as noted previously, the Project site is regularly disked. As such, special-status plant species are unlikely to occur on the Project site, and development of the Project would not result in significant impacts to such species.

Special-Status Wildlife

Based on the results of the CNDDB search, a total of 27 special-status wildlife species have been recorded within five miles of the site. Of the 27 species, 23 species would be absent from or unlikely to occur on the site due to a lack of suitable habitat. For example, because the site lacks vernal pool/depressional seasonal wetland habitat, federally-listed vernal pool invertebrates do not occur on the site. In addition, because the project site is surrounded by existing development on all sides, the project site does not contain and is not connected to open, uncultivated groundcover which would be required for American badgers to occur on-site. However, as described in the following sections, the project area contains suitable habitat for burrowing owl, white-tailed kite, Modesto song sparrow, Swainson's hawk, as well as migratory birds and raptors protected under the MBTA.

Burrowing Owl

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

CDFW's CNDDB contains approximately 39 occurrences of western burrowing owl within five miles of the site, and the site consists of ruderal grassland that is within the range of western burrowing owl. Because the project site is within modeled habitat for western burrowing owl, preconstruction surveys would be required to ensure that the proposed development would not result in impacts to the species.

White-tailed kite

The white-tailed kite is identified by California Fish and Game Code 3511 as a fully protected species. The CNDDB has recorded 17 occurrences of white-tailed within five miles of the site. Potential nesting habitat for the white-tailed kite occurs within various existing landscaping trees along the sidewalks which border the project site. The white-tailed kite may also forage within the ruderal grasses growing on the project site. Although the potential nesting trees would not be removed as part of development of the site, mitigation would be required in order to ensure that construction activities associated with

the Project would not adversely impact potential white-tailed kite nesting and foraging habitat.

Modesto Song Sparrow

The Modesto song sparrow is endemic to California, where it resides only in the north-central portion of the Central Valley. Highest densities occur in the Butte Sink area of the Sacramento Valley and near the Sacramento-San Joaquin River. Song sparrows are also numerous in the delta, particularly in southwestern Sacramento County along riparian corridors, vegetated irrigation canals and levees, and among freshwater marshes. Breeding typically occurs from mid-March to early August.

The CNDDB has recorded 17 occurrences of Modesto song sparrow within five miles of the site. The project site is located approximately one mile to the east of wetlands associated with the Sacramento River. In addition, several manmade lakes associated with Bartholomew Park surround the project site approximately 1,000 feet to the east, west, and south, just beyond surrounding residences and Laguna Town Hall. Because the project site is within 1,000 feet of modeled habitat for Modesto song sparrow, and because the project site is within the vicinity of Modesto Song sparrow breeding habitat, the potential exists for Modesto song sparrow to nest within the trees along the project site borders or to forage within the ruderal grasses growing on-site. Preconstruction surveys would be required to ensure that the proposed development would not result in impacts to the species.

Swainson's Hawk

Swainson's hawk is a State-listed threatened species. Historically, Swainson's hawks foraged in the agricultural lands in and around Elk Grove.[6] According to a memorandum prepared by Hunting Environmental, multiple known Swainson's hawk nest sites occur within five miles of the Project site.[7] Many of these nest sites are associated within protected lands, such as the Stone Lakes National Wildlife Refuge and the Sacramento Regional Wastewater Treatment Plan Buffer lands. The Project site could therefore provide foraging habitat for Swainson's hawk; however, the surrounding mixed development land uses which surround the Project site, including multi-family residential development, commercial development, and parks and recreation, reduce the likelihood that Swainson's hawk would use the Project site as foraging habitat. Furthermore, the grassland present on the Project site consists of a dense canopy (except during and immediately after disking) which obscures prey presence, thus making the Project site marginally valued habitat for Swainson's hawk.

In 2003, the City established and adopted Chapter 16.130 (Swainson's Hawk Impact Mitigation Fees) of the Elk Grove Municipal Code, which establishes mitigation policies tailored for projects in Elk Grove that have been determined through the CEQA process to result in a "potential significant impact" on Swainson's hawk foraging habitat. Chapter 16.130 of the Municipal Code serves as a conservation strategy that is achieved through the selection of appropriate replacement lands and through management of suitable habitat value on those lands in perpetuity.[8]

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6 City of Elk Grove. *Swainson's Hawk Program.* Available at: http://www.elkgrovecity.org/city_hall/departments_divisions/planning/resources_and_policies/swainsons_hawk_program. Accessed January 2021.

7 Hunting Environmental. *Laguna Main Street Apartments (PLNG-047).* April 1, 2021.

8 Ibid.

The Project would include grading of the entire Project site, thereby resulting in the removal of approximately 5.86-acres of ruderal grassland that may provide foraging habitat for Swainson's hawk. The CDFW considers five or more vacant acres within ten miles of an active nest within the last five years to be significant foraging habitat for Swainson's hawk, the conversion of which to urban uses is considered a significant impact and requires mitigation. Although the Project site presents marginally suitable habitat for Swainson's hawk, the Project site is located within ten miles of a Swainson's hawk nest that has been active within the last five years and would convert more than five acres of vacant land to urban uses. Therefore, mitigation for Swainson's hawk would be required.

Based on the above, Project implementation could result in permanent and temporary direct impacts to Swainson's hawk, related to habitat loss and construction disturbance, respectively.

Migratory Birds and Raptors

The potential exists for migratory birds and raptors protected under the MBTA to nest within the landscaping trees located along the sidewalks which border the project site. Buildout of the Project during the nesting period for migratory birds (i.e., typically between February 1 to August 31), including initial grading activities, could pose a risk of nest abandonment and death of any eggs or young that may be present within nests that are near the Project site.

Conclusion

Based on the above, development of the Project could result in a significant impact related to special-status species, although special-status plant species are not likely to occur on-site. Implementation of the Project could result in a ***potentially significant*** impact to burrowing owls, white-tailed kite, Modesto song sparrow, Swainson's hawk, and migratory birds and raptors protected by the MBTA. However, implementation of Mitigation Measures IV-1 through IV-5 below would ensure that the Project would have a less-than-significant impact, either directly or through habitat modifications, on species identified as special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS.

Mitigation Measure(s)

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

Burrowing Owl

IV-1 *During the non-breeding season (late September through the end of January), the Applicant shall conduct a survey for burrowing owls and burrows or debris that represent suitable nesting or refugia habitat for burrowing owls within areas of proposed ground disturbance. Should owls be present, construction activities shall avoid the refugia by 250 feet until the burrowing owl vacates the site. CDFW may provide authorization for the applicant to conduct activities (burrow exclusion, etc.,) that may discourage owl use.*

If clearing and construction activities are planned to occur during the nesting period for burrowing owls (February 1–August 31), a qualified biologist shall conduct a targeted burrowing owl nest survey of all accessible areas within 500 feet of the proposed construction area within 14 days prior to construction initiation, as described in CDFG's Staff Report on Burrowing Owl Mitigation, published March 7, 2012. Surveys shall be repeated if Project activities are suspended or delayed for more than 14 days during nesting season. The results of the surveys shall be submitted to the Development Services Department. If burrowing owls are not detected, further mitigation is not required.

If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until a qualified biologist determines that the young have fledged and adult has vacated, or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the City to determine if the nest buffer can be reduced.

White-tailed Kite

IV-2. *Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15 - August 31), a qualified biologist shall conduct a preconstruction survey no more than one month prior to construction to establish whether white-tailed kite is nesting in trees in or visible from the site. The findings of the survey shall be submitted to the Development Services Department. In the event active nests are found, a non-disturbance buffer of 300 feet shall be established or as otherwise prescribed by a qualified biologist. The buffer shall be demarcated with painted orange lath or via the installation of orange construction fencing. Disturbance within the buffer shall be postponed until a qualified biologist has determined that the young have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.*

Swainson's Hawk

IV-3(a). *A targeted Swainson's hawk nest survey shall be conducted throughout all accessible areas within 0.5-mile of the proposed construction area within 14 days prior to construction activities. If no active Swainson's hawk nests are identified on or within 0.5-mile of the Project site within the recommended survey periods, a letter report summarizing the survey results shall be submitted to the Development Services Department within 30 days following the final survey, and no further avoidance and minimization measures for nesting habitat are required.*

If active Swainson's hawk nests are found within 0.5-mile of the construction area, construction shall cease within 0.5-mile of the nest until a qualified biologist determines that the young have fledged, or that the nesting attempt has failed. If the Project applicant desires to work within 0.5-mile of the nest, the applicant shall consult with CDFW and the City to

determine if the nest buffer can be reduced. The Project applicant, the qualified biologist, the City, and CDFW shall collectively determine the nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active Swainson's hawk nest is found within the survey area prior to construction, then the Project applicant shall implement additional mitigation recommended by the qualified biologist based on CDFW guidelines and obtain any required permits from CDFW.

IV-3(b). *Prior to initiation of ground disturbing activity for the Project, a qualified biologist shall conduct a field survey of Swainson's hawk nest locations recorded in the CNDDB within a 10-mile radius of the Project site, during a period of maximum nesting activity (April through June). The biologist shall provide the City with a summary of findings of Swainson's hawk nesting activity within 10 miles of the Project site. If the biologist determines that the Project site is within 10 miles of an active Swainson's hawk nest (where an active nest is defined as a nest with documented Swainson's hawk uses within the past five years), the Project applicant shall mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing one of the following measures, as applicable, pursuant to CDFW's "Staff Report regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California" (1994):*

- *If an active nest is identified within one mile of the Project site: One acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the City.*
- *If an active nest is identified within five miles (but greater than one mile) of the Project site: 0.75-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the City.*
- *If an active nest is identified within 10 miles (but greater than five miles) of the Project site: 0.5-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the City.*

Results of the nesting survey, as well as proof of purchase of mitigation credits or other land protection mechanism acceptable to the City, as required per the above mitigation options, shall be provided to the Development Services Department for review and approval prior to initiation of ground disturbance for any portion of the Project site.

Modesto Song Sparrow and Other Migratory Raptors

IV-4(a). *If vegetation clearing, grading and/or construction activities are planned to occur during the migratory bird nesting season (February 15 to August 30), a preconstruction survey to identify active Modesto song sparrow and migratory bird nests shall be conducted by a qualified biologist within three days prior to construction initiation. The survey shall be performed by a*

qualified biologist for the purposes of determining presence/absence of active nest sites within a 500-foot radius of proposed construction areas, where access is available. If a break in construction activity of more than two weeks occurs, then subsequent surveys shall be conducted. A report summarizing the survey shall be provided to the City's Development Services Department within 14 days of the completed survey. If active nests are not found, further mitigation is not required.

If active Modesto Song Sparrow or raptor nests, not including Swainson's hawk, are found, construction activities shall not take place within 500 feet of the nest/s until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer shall be established. The no-disturbance buffers may be reduced if a smaller buffer is proposed by the qualified biologist and approved by the City (and CDFW if the species is a tricolored blackbird nesting colony) after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (are there visual or acoustic barriers between the proposed activity and the nest). The qualified biologist shall visit the nest as needed to determine when the young have fledged the nest and are independent of the site, or the nest may be left undisturbed until the end of the nesting season.

IV-4(b). *Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior, or as otherwise required through consultation with CDFW and the City. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with CDFW and the City. Construction activities may only resume within the buffer zone after a follow-up survey by the qualified biologist has been conducted and a report has been prepared indicating that the nest (or nests) are no longer active, and that new nests have not been identified.*

b. The project site does not contain any riparian habitat or sensitive natural communities. The site consists primarily of ruderal grasses that are regularly disked for fire suppression purposes. Therefore, impacts related to having a substantial adverse effect on a riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS would be ***less-than-significant.***

c. The project site does not contain any existing wetlands or other waters of the U.S. or State. Aerial photographs dated 1964 present two vernal pools located within the project site; however, upon site reconnaissance by Youngdahl Consulting Group on October 30, 2020, the pools no longer occur on-site.[9] Therefore, the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean

[9] Youngdahl Consulting Group, Inc. *Laguna Apartments, Sacramento County APNs 119-1110-009, -010, -013, & -014, Elk Grove, California*. November 2020.

Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Thus, a ***less-than-significant*** impact would occur.

d. The Project site is bordered by Vaux Avenue to the north, Renwick Avenue and Laguna Town Hall to the south, and existing development on all sides. The site is located with an urbanized area of the City of Elk Grove. The existing setting of the surrounding area limits the potential for use of the project site as a wildlife movement corridor. In addition, the Project site does not contain streams or other waterways that could be used by migratory fish or as a wildlife corridor for other wildlife species. Therefore, 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. Section 19.12 of the City of Elk Grove Municipal Code contains the City's Tree Preservation and Protection Ordinance. The ordinance provides protections for landmark trees, trees of local importance, and secured trees. Currently, the project site is bordered by landscaping trees associated with the sidewalk along the site perimeter. Although the potential exists for construction activities to be conducted within the critical root zone of the existing trees, the trees are not considered qualifying landmark trees, secured trees, and/or trees of local importance. Therefore, the 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. Sacramento County, the City of Rancho Cordova, the City of Galt, and other local partners have adopted the South Sacramento Habitat Conservation Plan (SSHCP). However, the City of Elk Grove is not a participating city. Furthermore, as noted above, this IS/MND includes mitigation measures to address potential impacts to species which are covered by the SSHCP, including burrowing owl and Swainson's hawk. The mitigation measures included herein generally do not conflict with the avoidance and minimization measures included in Chapter 5 of the SSHCP. Therefore, the Project site is not located in an area with an approved HCP/NCCP, or local, regional, or State habitat conservation plan. As a result, ***no impact*** would occur regarding a conflict with the provisions of such a plan.

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

a-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.

Based on the results of a record search of the California Historic Resources Information System (CHRIS) at the North Central Information Center (NCIC), a previous cultural resources study has covered a portion of the Project site.[10] Per the CHRIS search, two recorded historic-period cultural resources have been identified within a 0.25-mile radius of the project site, including evidence of a nineteenth-century cultivated field and twentieth-century unpaved roads. Because these resources are not located on the project site, and construction activities would not take place on the properties where the cultivated field and unpaved fields are located, development of the proposed project would not impact or alter the significance of these off-site historic-period cultural resources.

The project site contains one recorded prehistoric-period resource and one recorded historic-period cultural resource, identified as Sacramento River Tribal Cultural Landscape. The Sacramento River Tribal Cultural Landscape is identified by contemporary Nisenan as Hoyo Sayo/Tah Sayo and contemporary Plains Miwok as Wake-ce/Waka-Ly. The resource is defined by an approximately 55-mile-long corridor of the Lower Sacramento River encompassing waterways, tule habitat, fisheries, and other wildlife from approximately Knights Landing in the north to approximately Sherman Island in the south). Although the landscape is considered a culturally significant natural landscape for its association with the cultural practices and beliefs of the Nisenan and Plains Miwok, the landscape on the project site has been heavily altered over the past century and no longer contains character-defining elements (waterways, tule, fisheries, and other wildlife) to convey the significance of the resource. In addition, the project site is not identified within the City of Elk Grove Historic Resources Map as a site containing historic resources as defined by Elk Grove Municipal Code Chapter 7.00, and tribal consultation requests regarding potential proposed project impacts to P-24-5225 have not been received by the City to date. .[11] Therefore, while the potential exists for locating

[10] North Central Information Center. *Records Search Results for Laguna Main Street Apartments Project (APNs: 119-1110-009, -010, -013, -014)*. October 14, 2020.

[11] City of Elk Grove. *Historic Preservation Committee.* Available at: https://www.elkgrovecity.org/cms/One.aspx?portalId=109669&pageId=120058. Accessed February 2021.

historic-period cultural resources in the immediate vicinity of the project area, impacts to such resources are not anticipated.

Archaeologists locate prehistoric-period habitation sites on elevated landforms near streams in this part of Sacramento County. The project region is known as the ethnographic-period territory of the Plains Miwok, a tribe which inhabited the lower reaches of the Mokelumne and Cosumnes River and both banks of the Sacramento River from Rio Vista to Freeport. The Project area is situated in the Sacramento Valley approximately 0.5-mile northeast of intermittent streams. Given the extent of known cultural resources and the environmental setting, the potential exists for locating prehistoric-period cultural resources in the immediate vicinity of the project area.

Although impacts to known prehistoric and historic period cultural resources are not anticipated, the CHRIS results indicate that the potential exists for the Project to cause a substantial adverse change in the significance of unknown unique subsurface archaeological resources, including human remains. Such resources may exist in the Project area and may have been obscured by regular disking, resulting in an absence of surficial evidence. Such resources may have the potential to be uncovered during ground-disturbing activities at the Project site.

Based on the above, a moderate to high potential exists for the proposed Project to cause a substantial adverse change to a historical resource or unique archaeological resource pursuant to Section 15064.5, including human remains, and a ***potentially significant*** impact may occur. Implementation of Mitigation Measures V-1 through V-3 would ensure that if previously unknown resources are encountered during construction activities, the Project would not cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of dedicated cemeteries, during construction. Therefore, impacts would be considered less than significant with mitigation incorporated.

Mitigation Measure(s)

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

V-1. *In the event of the accidental discovery or recognition of any human remains, the Development Services Department shall be notified, and further excavation or disturbance of the find or any nearby area reasonably suspected to overlie adjacent human remains shall not occur until compliance with the provisions of CEQA Guidelines Section 15064.5(e)(1) and (2) has occurred. The Guidelines specify that in the event of the discovery of human remains other than in a dedicated cemetery, no further excavation at the site or any nearby area suspected to contain human remains shall occur and the County Coroner shall be notified to determine if an investigation into the cause of death is required. If the coroner determines that the remains are Native American, then, within 24 hours, the Coroner must notify the Native American Heritage Commission, which in turn will notify the most likely descendants who may recommend treatment of the remains and any grave goods. If the Native American Heritage Commission is unable to identify a most likely descendant or most likely descendant fails to make a recommendation within 48 hours after*

notification by the Native American Heritage Commission, or the landowner or his authorized agent rejects the recommendation by the most likely descendant and mediation by the Native American Heritage Commission fails to provide a measure acceptable to the landowner, then the landowner or his authorized representative shall rebury the human remains and grave goods with appropriate dignity at a location on the property not subject to further disturbances. Should human remains be encountered, a copy of the resulting County Coroner report noting any written consultation with the Native American Heritage Commission shall be submitted as proof of compliance to the Development Services Department. Work on the project site cannot commence until after the human remains are removed from the area.

V-2. *In the event that cultural resources or tribal cultural resources are discovered during grading or construction activities during development of the Project, work shall halt immediately within 100 feet of the discovery, the Development Services Director shall be immediately notified. The Applicant's on-site Construction Supervisor, the City of Elk Grove, an archaeologist meeting the Secretary of the Interior's Standards in Archaeology, and any applicable Native American tribes shall assess the discovery to determine if it qualifies as a tribal cultural resource. The appropriate treatment of the discovery, including any applicable avoidance or mitigation strategies, shall be determined in consultation with the City and the applicable tribes. Construction activities within 100 feet of the discovery shall not commence until the appropriate treatment has been determined and any applicable mitigation has been completed. Mitigation shall follow the recommendations detailed in Public Resources Code sections 21084.3(a) and (b), and CEQA Guidelines section 15370. Work may continue on other parts of the Project site while historical or unique archaeological resource mitigation takes place (Public Resources Code Section 21083.2).*

V-3. *The applicant shall retain the services of a qualified professional to conduct a worker environmental training session for the construction crew that will be conducting grading and excavation at the project site. The worker environmental training shall include archaeological and Tribal Cultural Resource awareness. The training shall be developed in coordination with the applicable tribes and approved by the City. The training shall identify the appropriate point of contact in the case of tribal cultural resource discovery and shall include relevant information regarding tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The training shall also underscore the requirement for confidentiality and culturally-appropriate treatment of tribal cultural resources.*

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 Project would be required to comply, as well as discussions regarding the Project's potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CAL Green Code (CCR Title 24, Part 11), is a portion of the California Building Standards Code (CBSC), which became effective with the rest of the CBSC on January 1, 2020. The purpose of the CAL Green Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CAL Green standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CAL Green Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

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. 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.

One of the improvements included within the 2019 Building Energy Efficiency Standards is the requirement that certain residential developments, including some single-family and low-rise residential developments, include on-site solar energy systems capable of producing 100 percent of the electricity demanded by the residences. Certain residential developments, including developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement; however, such developments are subject to all other applicable portions of the 2019 Building Energy Efficiency Standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use approximately 53 percent less energy than those under the 2016 standards. The Project would provide adequate space for rooftop solar ready zones that could supply at least 15 percent of annual energy demand generated by the Project; therefore, the proposed project would be in compliance with the 2019 Building Energy Efficiency Standards.

Construction Energy Use

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

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site and off-site improvement areas would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. 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), which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The CARB Diesel Vehicle Regulation described above, with which the 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 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, construction activities would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Following implementation of the Project, PG&E would provide natural gas to the Project site. Electricity would be provided by SMUD. Energy use associated with operation of the Project would be typical of residential uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the Project would result in transportation energy use associated with vehicle trips generated by the proposed development.

The 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, including the more stringent Tier 1 standards required per the City's Climate Action Plan (CAP), 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 Project would not be wasteful, inefficient, or unnecessary. The City's CAP would require approximately 10 percent of the proposed residential units to be all-electric; thus, such units would not involve any natural gas demand. In addition, electricity supplied to the Project by SMUD would comply with the State's Renewables Portfolio Standard, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent by 2030. For 2023, the first full year that this IS/MND assumes the Project would be operational, SMUD's renewable portfolio standard is anticipated to be approximately 41.1 percent. The Project would incorporate sufficient rooftop space for solar ready zones which could supply at least 15 percent of annual energy demands generated by future residents. Thus, a portion of the energy consumed during Project operations would originate from renewable sources. It should also be noted that a minimum of 52.5 percent of both parking lots would be shaded by landscaping trees, which would reduce heat island effects on the Project and discourage energy use associated with air conditioning and the use of HVAC systems.

With regard to transportation energy use, the Project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. Per EGMC Section 23.58.120, 2.5% of total Project parking spaces would be required to be EV-ready upon project development. An additional 2.5% of the total number of parking spaces would be required to be dedicated for the future installation of additional EV-ready parking options as the demand for on-site EV charging increases. In addition, as discussed in Section

XVII, Transportation, of this Initial Study, the cumulative VMT associated with development of the Project and other existing and planned development within the City of Elk Grove would be below the established city-wide VMT threshold.

Conclusion

Based on the above, construction and operation of the 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.

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 on a Geotechnical Engineering Study (GES) Update prepared by Youngdahl Consulting Group, Inc. in June 2020 (Appendix C).[12] The June 2020 GES Update was prepared for the purpose of updating a previous GES for the project site conducted by Youngdahl Consulting Group, Inc. in December 2017 to conform with the 2019 CBSC provisions.

ai-ii. As noted in the General Plan EIR, Sacramento County is less affected by seismic events and geologic hazards than other portions of the state.[13] The California Geological Survey's (CGS) map of seismic shaking hazards in California shows that most of Sacramento County, including the City of Elk Grove, is located in a relatively low-intensity ground shaking zone. The City does not contain any active or potentially active faults, and is not located within an Alquist-Priolo Earthquake Fault Zone. Per the GES Update, the nearest mapped fault is the Midland Fault, located approximately 18 miles to the southwest of the project site. Thus, the potential for surface rupture due to faulting occurring beneath the Project site during the design life of the proposed development would be low.

Although the potential is low for the proposed apartment buildings to be subject to seismic ground shaking, the proposed buildings would be properly engineered in accordance with the California Building Code (CBC), which includes engineering standards appropriate for

[12] Youngdahl Consulting Group, Inc. *Laguna Apartments: Laguna Main Street & Vaux Avenue, Elk Grove, California: Geotechnical Engineering Study Update.* June 2, 2020.

[13] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.6-1]. February 2019.

the seismic area in which the Project site is located. The GES Update prepared for the Project includes updated seismic parameters for structural design based on the 2019 edition of the CBC. In addition, the most recent edition of the CBC is adopted as Section 16.04.010 of the City's Municipal Code. Conformance with the design standards is enforced through building plan review and approval by the City of Elk Grove Division of Building prior to the issuance of building permits. Proper engineering of the Project would ensure that seismic-related effects would not cause adverse impacts. Therefore, a ***less-than-significant*** impact would occur related to seismic surface rupture and strong seismic ground shaking.

aiii,aiv, c,d. The Project's potential effects related to liquefaction, subsidence, landslides, lateral spreading, and expansive soils are discussed in detail below.

Liquefaction / Settlement

When subsurface earth materials move, the movement can cause the gradual settling or sudden sinking of ground. The phenomenon of settling or sinking ground is referred to as subsidence, or settlement. Liquefaction is the sudden loss of soil shear strength and the sudden increase in porewater pressure caused by shear strains, similar to what could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than 25 percent and located within the top 40 feet are most susceptible to liquefaction.

During site reconnaissance of the project site on November 21, 2017, five exploratory borings were drilled to explore the subsurface conditions of the project site. Upper soil layers were generally observed to consist of sand in a loose to very dense and slightly moist to moist condition up to 10 feet below the ground surface (bgs). Within three borings, occasional pockets of clay and sandy clay were encountered in a stiff to hard condition to depths ranging from 3.5 to 5.5 feet bgs. Underlying the surface soils, variably cemented interbedded sands and silts were observed to the maximum depth of 20 feet bgs with the exception of a one-foot-thick sandy clay lens encountered in a boring 13 feet bgs. Therefore, the project area is considered to have a relatively shallow depth to cemented soils. Total settlement is anticipated to be less than one inch.

It should be noted that Youngdahl Consulting, Inc. only explored subsurface conditions at the project site up to 20 feet bgs; however, Youngdahl Consulting Inc. has performed a liquefaction analysis for a separate project within the project vicinity using a 50-foot boring which provides further insight into the general subsurface soil conditions of the project area. Based on Youngdahl Consulting Inc.'s knowledge of the area and the conditions observed, in addition to the relatively low seismicity of the area, the potential for seismically induced damage due to liquefaction and settlement is negligible.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The Project site does not contain, and is not adjacent to, any steep slopes. Thus, landslides are not likely to occur on- or off-site as a result of the Project.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The Project site does not contain open faces within a distance that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to affect the site is low.

Expansive Soils

Expansive soils are soils which undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted, potentially resulting in damage to building foundations. Occasional pockets of plastic materials (clay soils) were encountered in the surficial materials on-site, and the majority of the plastic materials encountered at the site lie below thick weakly to moderately cemented layers of medium dense to dense sand or stiff to very stiff silt. Additionally, the materials encountered in the soil exploration were generally non-plastic (sand and non-plastic silt). The non-plastic materials were generally observed to be non-expansive. However, occasional lenses of moderately expansive soils were observed at depths anticipated to support foundations or be near foundations. Therefore, recommendations have been provided in the GES to reduce the potential for damage from unstable soil conditions, including expansive soils, and associated risks to the proposed development would not occur.

Conclusion

Based on the above discussion, the Project would not result in potential hazards or risks related to liquefaction, landslides, lateral spreading, or subsidence. Therefore, the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction or landslides, 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 landslide, lateral spreading, subsidence, liquefaction or collapse. However, without adherence to all structural and design recommendations provided in the June 2020 GES Update, ***potentially significant*** impacts to life and property related to being located on expansive soils may occur, and adverse impacts may occur***.*** Compliance with Mitigation Measure VII-1 would ensure that the proposed project would comply with structural and design recommendations in the GES Update to reduce potential impacts to less-than-significant levels.

Mitigation Measure(s)

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

VII-1. *Prior to approval of any grading permits, the project Civil Engineer shall show on the Project plans that the project design would adhere to all engineering recommendations provided in the site-specific Geologic Engineering Study Update prepared by Youngdahl Consulting, Inc. The Project plans shall include, but would not be limited to, the over-excavation and recompaction of native soils, pre-saturation of subgrade soils prior to foundation and slab construction, and structural design in accordance with Site Class D of the CBSC Ground Motion Parameters. Project plans shall be subject to review and approval by the City Engineering Division.*

b. During grading activities associated with development of the Project, and prior to overlaying of the ground with impervious surfaces and landscaping elements, topsoil would temporarily be exposed. Thus, the potential exists for wind and water to erode portions of the exposed topsoil during construction, which could adversely affect downstream storm drainage facilities. However, as noted in the General Plan EIR, Chapter 16.44, Land Grading and Erosion Control, of the City's Municipal Code establishes administrative procedures, minimum standards of review, and implementation and enforcement procedures for controlling erosion caused by land clearing, grubbing, grading, filling, and land excavation activities. Section 16.44.050 includes the following requirement:

> Except as provided by EGMC Section 16.44.060, 16.44.065 or 16.44.070, a grading and erosion control permit shall be required to: A) grade, fill, excavate, store or dispose of three hundred fifty (350 yd^3) cubic yards or more of soil or earthy material, or B) clear and grub one (1) acre or greater of land within the City. A separate permit is required for work on each site unless sites are contiguous, have the same ownership, and are included in the approved plan. Any determination by the Director as to whether a permit is required may be appealed pursuant to the provisions of EGMC Section 16.44.300.

Furthermore, per Section 16.44.090, plans submitted to the City must include the location, implementation schedule, and maintenance schedule of all erosion control measures and sediment control measures to be implemented or constructed prior to, during or after the proposed activity, along with a description of measures designed to control dust and stabilize the construction site road and entrance. Per Section 16.44.150, grading and erosion control permit applications and improvement plans may only be issued or approved by the City if the Public Works Director finds that the Project would not adversely affect surrounding properties and public rights-of-way, the water quality of watercourses, or existing drainage.

Based on the above, the Project would be required to comply with all applicable standards established in Chapter 16.44, including issuance of a grading and erosion control permit as required by Section 16.44.050. Given compliance with Chapter 16.44 and other applicable City regulations related to erosion control, the Project would result in a less-than-significant impact related to substantial soil erosion or loss of topsoil during construction. The General Plan EIR concluded that buildout of the City, including the Project site, would result in a ***less-than-significant*** impact related to related to soil erosion, given compliance with existing State and local regulations and standards.

e. The Project would connect to the existing SASD sanitary sewer lines located in the Project vicinity. The construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the Project. Therefore, ***no impact*** regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

f. As noted in the General Plan EIR, impacts to paleontological resources can occur when excavation activities encounter fossiliferous geological deposits and cause physical destruction of fossil remains. The potential for impacts on fossils depends on the sensitivity of the geologic unit and the amount and depth of grading and excavation. Much of the City's Planning Area is considered highly sensitive for paleontological resources.

Therefore, ground-disturbing activities associated with the Project could result in a ***potentially significant*** impact related to the uncovering of paleontological resources. However, Implementation of Mitigation Measure VII-2, as adopted from Mitigation Measure 5.6.5 of the General Plan EIR, would ensure that the Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Thus, a less-than-significant impact would occur with implementation of mitigation.

Mitigation Measure(s)

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

VII-2. *Before the start of any earthmoving activities, the Project applicant shall retain a qualified scientist (e.g., geologist, biologist, paleontologist) to train all construction personnel involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. Training on paleontological resources shall also be provided to all other construction workers but may use videotape of the initial training and/or written materials rather than in-person training.*

If any paleontological resources (fossils) are discovered during grading or construction activities within the Project area, work shall be halted immediately within 50 feet of the discovery, and the City Planning Division shall be immediately notified. The Project applicant shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (SVP 2010). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the City to be necessary and feasible shall be implemented by the applicant before construction activities resume in the area where the paleontological resources were discovered.

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?	☐	✖	☐	☐

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 GHG are inherently considered cumulative impacts.

Implementation of the 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

In September 2006, Assembly Bill (AB) 32 was enacted, which requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. AB 32 delegated the authority for implementation to the CARB and directs the CARB to enforce the statewide cap. In accordance with AB 32, CARB prepared the Climate Change Scoping Plan (Scoping Plan) for California, which was approved in 2008 and subsequently revised in 2014 and 2017. The 2017 revision to the Scoping Plan updated the plan in compliance with Senate Bill (SB) 32. SB 32 codified emissions reduction targets for the year 2030, which had previously been established by Executive Order B-30-15.

Per SMAQMD and Section 15183.5 of the CEQA Guidelines, a project may satisfy applicable GHG analysis requirements under CEQA by demonstrating compliance with a qualified CAP.[14] Specifically, Section 15183.5 states the following:

> Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long-range development plan, or a separate plan to reduce greenhouse gas emissions. Later Project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental

[14] Sacramento Metropolitan Air Quality Management District. *Climate Action Planning in the Sacramento Metropolitan Air Quality Management District*. November 2017.

> documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in section 15152 (tiering), 15167 (staged EIRs) 15168 (program EIRs), 15175-15179.5 (Master EIRs), 15182 (EIRs Prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).

On February 27, 2019, the City of Elk Grove adopted an updated CAP that includes City-wide goals and strategies for the reduction of GHG emissions. The CAP includes per capita GHG emissions targets for the City, which include the following: 7.6 $MTCO_2e$/yr/capita by 2020; 4.1 $MTCO_2e$/yr/capita by 2030; and 1.4 $MTCO_2e$/yr/capita by 2050. The CAP targets are not intended to be used as thresholds of significance for individual project emissions under CEQA. Rather, the targets presented in the CAP are community-wide goals intended to demonstrate the City's consistency with the State's GHG reduction targets set forth in AB 32 and SB 32. In order to meet the City's GHG emissions targets, the CAP sets forth a number of GHG emission reduction implementation measures. Individual projects that are consistent with the implementation measures of the CAP would be considered to meet the City's emissions targets and, thereby, would not conflict with implementation of the CAP or the statewide emission reduction targets of AB 32 or SB 32.

For informational purposes, 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. The CO_2 intensity factor within CalEEMod was adjusted to reflect SMUD's progress towards achieving the State's Renewable Portfolio Standard (RPS) goals. Construction and operations of the proposed Project and the associated GHG emissions are discussed below, and all modeling outputs are included in Appendix A to this IS/MND.

Construction GHG Emissions

Construction-related GHG emissions constitute a temporary 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, total construction-related GHG emissions were estimated to be 818.07 $MTCO_2e$. Such emissions would be released over the course of the approximately 1.5-year construction period. As noted above, the emissions estimates presented herein are for disclosure purposes only and do not affect the conclusions of this analysis.

Operational GHG Emissions

The emissions of GHGs resulting from operations of the proposed Project were estimated using CalEEMod, and are presented in Table 5 below. As shown in the table, the anticipated GHG emission rate for the first operational year (2023) would be 1.75 $MTCO_2e$/yr/capita, which falls below the 2020 and 2030 GHG targets set forth in the CAP.

As noted in the CAP, the 2020 and 2030 targets are the primary focus of the CAP, and the City's long-term 2050 goal is not a specific reduction target that can or must be met currently in local plans. The results are presented for informational purposes only, because, as discussed above, the determination of significance for operational emissions is based on consistency with the City's CAP.

Table 5
Maximum Unmitigated Operational GHG Emissions

Operational Emission Source	Annual GHG Emissions
Area	2.56 $MTCO_2e$/yr
Energy	73.52 $MTCO_2e$/yr
Mobile	728.59 $MTCO_2e$/yr
Solid Waste	34.24 $MTCO_2e$/yr
Water	14.53 $MTCO_2e$/yr
Total Annual Operational GHG Emissions[1]	**853.44** $MTCO_2e$/yr
GHG Emissions per Capita[2]	**1.75 $MTCO_2e$/yr/resident**

[1] Rounding may result in small differences in summation.
[2] 853.44 $MTCO_2e$/yr / 487 residents = 1.75 $MTCO_2e$/yr/capita

Source: CalEEMod, December 2020 (see Appendix A).

Elk Grove CAP

The Elk Grove CAP is considered a qualified plan for determining consistency with AB 32 and SB 32 and, thus, determining the significance of project-related GHG emissions. The General Plan EIR concluded that, with implementation of the CAP, buildout of the City's Planning Area would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs, and a less-than-significant impact would occur. As such, projects that are consistent with the CAP and implement all applicable CAP measures would result in less-than-significant impacts related to GHG emissions. While the proposed project includes a GPA request, Table 6 demonstrates that the VMT generated by the project would be less than that which was anticipated for the site in the General Plan and associated CAP. Thus, the project can rely upon the CAP for assessment of GHG emissions.

Table 6, below, presents a consistency discussion for each of the applicable CAP measures.

Table 6
Elk Grove CAP Consistency

CAP Implementation Measure	Project Consistency
BE-4. Building Stock: Encourage or Require Green Building Practices in New Construction Encourage new construction Projects to comply with CALGreen Tier 1 standards, including a 15 percent improvement over minimum Title 24 Part 6 Building Energy Efficiency Standards.	Consistent with measure BE-4 and the City's CAP, the proposed Project would comply with CALGreen Tier 1 standards. Implementation of Mitigation Measure VIII-1 would ensure compliance with this measure.
BE-5. Building Stock: Phase in Zero Net Energy Standards in New Construction Phase in zero net energy (ZNE) standards for new construction, beginning in 2020 for residential Projects and 2030 for commercial Projects. Specific phase-in requirements and ZNE compliance standards will be supported by updates in	The 2019 CBSC has begun phasing in ZNE requirements by requiring residential projects to meet 100 percent of their electricity needs through rooftop solar. The proposed project would incorporate sufficient rooftop space for solar ready zones which could supply at least 15 percent of annual energy demands generated by the proposed project. Therefore, the Project would comply with this measure.

the triennial building code updates, beginning with the 2019 update.	
BE-6. Building Stock: Electrification in New and Existing Residential Development Encourage and incentivize new residential developments to include all-electrical appliances and HVAC systems in the design of new Projects. Support local utilities in implementing residential retrofit programs to help homeowners convert to all electrical appliances and HVAC systems. Explore the feasibility of phasing in minimum standards for all-electric developments.	Implementation of Mitigation Measure VIII-1 would ensure compliance with this measure.
BE-7. Building Stock: Solar Photovoltaics in New and Existing Residential and Commercial Development Encourage and require installation of on-site solar photovoltaic (PV) in new single-family and low-rise multi-family developments. Promote installation of on-site PV systems in existing residential and commercial development	As noted above, the proposed project would incorporate sufficient rooftop space for solar ready zones which could supply at least 15 percent of annual energy demands generated by the proposed project. Therefore, the Project would comply with the intent of this measure.
TACM-2. Transit-Oriented Development Support higher-density, compact development along transit by placing high-density, mixed-use sites near transit opportunities.	The Project would include construction of high-density residential uses. In addition, multiple bus stops are located near the Project site, including a sheltered bus stop along the northern frontage of the project site east of Laguna Main Street and an unsheltered bus stop along the southern side of the Laguna West Plaza east of Laguna Main Street. As such, the Project would comply with this measure.
TACM-4. Pedestrian and Bicycle Travel Provide for safe and convenient pedestrian and bicycle travel through implementation of the Bicycle, Pedestrian, and Trails Master Plan and increased bicycle parking standards.	In 2014, the City adopted the Bicycle, Pedestrian, and Trails Master Plan. As noted therein, Class II bike lanes are currently available along Laguna Boulevard, and Class III bike lanes are available along Lakepoint Drive. Such bike lanes connect to the City-wide network of bike trails. Future bike trails are planned along Laguna Main Street, directly north of the Project site. Planned bike trails are not identified within the Project site and, therefore, implementation of the Project would not impede the development of any bicycle facilities that are planned for development in the Bicycle, Pedestrian, and Trails Master Plan. Paved sidewalks are present along all frontages of the Project site. In addition, the Project would provide for attached sidewalks between the proposed buildings, and a curb ramp and marked crossway to the bus stop along Vaux Avenue. The Project would not alter the existing sidewalks and bike lanes located along the Project frontages. As such, the Project would comply with this measure.

TACM-6. Limit Vehicle Miles Traveled Achieve a 15 percent reduction in daily VMT compared to existing conditions (2015) for all new development in the City, consistent with state-mandated VMT reduction targets for land use and transportation Projects.	A 15 percent reduction in VMT from existing (2015) conditions is demonstrated by conformance with the General Plan's land use and cumulative VMT limits. The land use VMT limit for High Density Residential is 20.6 VMT per service population. As described in further detail in Section XVII, Transportation, the proposed Project would result in a VMT per service population of 20.2, thus, meeting the land use VMT limit. Therefore, the Project would not exceed the City's VMT limit for the proposed land use designation, and the Citywide cumulative limit of 6,367,833 VMT would not be exceeded.
TACM-8. Tier 4 Final Construction Equipment Require all construction equipment used in Elk Grove to achieve EPA-rated Tier 4 Final diesel engine standards by 2030 and encourage the use of electrified equipment where feasible.	Consistent with measure TACM-8, the Project applicant has indicated that all construction equipment would be EPA-rated Tier 4. Considering construction would occur in 2021 and 2022 and would be completed prior to 2030, the Project would not be required to use entirely Tier 4 Final construction equipment. Implementation of Mitigation Measure VIII-1 would ensure compliance with the general intent of this measure.
TACM-9. EV Charging Requirements Adopt an electric vehicle (EV) charging station ordinance that establishes minimum EV charging standards for all new residential and commercial development. Increase the number of EV charging stations at municipal facilities throughout the City.	Per Section 23.58.120 of the City's Municipal Code, new multi-family residential development projects shall include dedicated EV charging spaces. Consistent with the Code, the project would be required to provide at least six EV charging spaces and at least six EV ready spaces for future installation of additional EV charging infrastructure. Compliance with the City's Municipal Code would ensure that the proposed Project provides sufficient EV charging infrastructure to comply with this suggested measure.
Source: City of Elk Grove. Climate Action Plan: 2018 Update. January 2019.	

As shown above, with implementation of Mitigation Measure VIII-1, the Project would comply with all applicable measures presented within the CAP. However, without the required implementation of Mitigation Measure VIII-1, consistency with several measures cannot be ensured at this time, and a potentially significant impact could occur.

Conclusion

As noted previously, the City's CAP was established to ensure the City's compliance with the statewide GHG reduction goals required by AB 32 and SB 32. As demonstrated in the table above, implementation of Mitigation Measure VIII-1 would be required to ensure consistency with all applicable measures within the City's CAP. As such, without mitigation, the Project could not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)

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

VIII-1. *Prior to issuance of any grading or building permits, Project Building Plans shall demonstrate compliance with the following applicable measures included in the City's Climate Action Plan, to the satisfaction of the City of Elk Grove Development Services Department:*

- *The Project shall comply with 2019 CALGreen Tier 1 standards, including a 15 percent improvement over minimum Title 24, Part 6, Building Energy Efficiency Standards (CAP Implementation Measure BE-4).*
- *At least 10 percent of all units shall include all-electric appliances and HVAC systems, including, but not limited to, (A) a heat pump water heater with a minimum Uniform Energy Factor of 2.87, and (B) an induction cooktop/range for all cooking surfaces in the unit (CAP Implementation Measure BE-6).*
- *A minimum of 25 percent of the off-road construction fleet used during construction of the Project shall include Environmental Protection Agency certified off-road Tier 4 diesel engines (or better) (CAP Implementation Measure TACM-8).*

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 land uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Future residents may use common household cleaning products, while landscaping maintenance activities may require the use of 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 amount anticipated to be utilized on the site, routine use of such products would not represent a substantial risk to public health or the environment. In addition, the City provides a special waste collection center for the proper disposal of household hazardous wastes. Therefore, 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 Project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) 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 City ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),[15] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the Project, the Sacramento County Department of Health Services) in accordance with the regulations adopted pursuant to this section. The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of this Project, the contractor is required to notify the Sacramento County Department of Health Services in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

Existing On-Site Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was prepared for the Project by Youngdahl Consulting Group, Inc. in November 2020 (Appendix D). The Phase I ESA included a site visit; historical research regarding past onsite conditions and usage; review of regulatory agency listings and records, including an agency database report; and review of a user questionnaire.

Potential findings per the Phase I ESA can include recognized environmental conditions (RECs), controlled RECs (CRECs), and historical RECs (HRECs). An REC is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at least at a property due to release to the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment." The term includes hazardous substances or petroleum products even under conditions in compliance with regulatory laws. CRECs are similarly defined as an REC resulting from a past release of hazardous substances or petroleum products that have been addressed to the satisfaction of the applicable regulatory authority, but with the aforementioned hazardous substances or products allowed to remain in place subject to the implementation of required controls. HRECs are a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority.

Per the Phase I ESA prepared for the project site by Youngdahl Consulting Group,[16] a review of historical and aerial photographs and USGS topographic maps indicate that the Project site has consisted of vacant, regularly disked land since at least 1937. The site has not been developed with previous structures or used for agricultural purposes; therefore, environmental risks associated with the use of pesticides, herbicides, termiticides, asbestos-containing materials, and/or lead-based paint would not occur. Based on the above analysis of historical uses of the Project site, HRECs do not exist in relation to the Project site.

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15 Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

16 Youngdahl Consulting Group, Inc. *Laguna Apartments, Sacramento County APNs 119-1110-009, -010, -013, & -014, Elk Grove, California.* November 2020.

The Project site setting currently contains primarily disked, bare land that is bisected by the north-south trending Laguna Main Street through the center of the site. Utilities were observed to run around the periphery of the site, and polyvinyl chloride (PVC) stub-outs and transformer boxes were observed along the peripheries and within the northern and southern portions of the site. Upon site reconnaissance, the transformers were observed to be in good condition; did not contain leaks, and were mounted on concrete pads. The PVC pipes similarly did not pose environmental concerns. Based on site reconnaissance, the current conditions of the project site, including the utilities stub-outs and an on-site bus stop located along Vaux Avenue, do not indicate the presence of RECs, CRECs, or other risks related to potential environmental hazards.

However, the Phase I ESA identified several adjacent properties surrounding the project site that have historically used and/or currently use hazardous substances and materials which pose environmental risks to the Project site. Specifically, Lakeside Cleaners/Martinizing Dry Cleaning, located 130 feet north of the Project Site at 9098/9097 Laguna Main Street, has a recorded history of using DF 2000, hydrocarbon solvent, tetrachloroehylene (PCE), and petroleum distillate on-site. PCE was reported as being used on-site as recently as 2012 and in quantities between 15 and 30 gallons. Recent records show that the site now uses DF-2000, a petroleum hydrocarbon that contains naphthalene.

Youngdahl Consulting Group noted that the dumping of wastewater with remnant hazardous chemicals into sewer drains is common for dry cleaning businesses. Drained wastewater containing hazardous materials from the neighboring dry-cleaning business would flow into the municipal sanitary sewer lines located within Vaux Avenue, which runs along the northern boundary of the Project site. If the sewer lines within Vaux Avenue were to contain leaks, the potential exists for nearby soils and possibly groundwater to have been impacted by soil vapor intrusion risks. Vapor intrusion is the term used to describe the migration of volatile organic compounds (VOCs) via soil vapor from the sub-surface soil and/or groundwater upward into buildings, potentially causing unacceptable chemical exposure for building occupants. Vapor intrusion within the Project site due to the wastewater hazards generated by the dry-cleaning business would be considered a potential REC.

Two additional surrounding properties have been identified pertaining to the use of and/or on-site location of hazardous materials. An Apple distribution center located at 2911 Laguna Boulevard, less than 0.25-mile north of the Project site, is a permitted underground storage tank (UST) site and also contains reportable quantities of hazardous materials, including up to 2,400 gallons of diesel fuel contained in above-ground and underground storage tanks, sulfuric acid, lead acid batteries, and small quantities of miscellaneous chemicals and E-waste. However, significant violations or releases of hazardous materials at the Apple distribution center have not been recorded. In addition, soil samples in the area of the fuel islands and USTs located at the Shell Service Station located at 9100 Harbour Point Drive, approximately 0.8-mile east of the site, were found to have notable concentrations of gasoline, methyl tert butyl ether (MTBE) and tert butyl alcohol (TBA), with MTBE being the primary chemical of concern with some elevated gasoline in the core area of an offsite plume. Groundwater flow direction is toward the northeast, and the core of the plume is located northeast of the source area. However, the Project site is located over 2,500 feet from the core area of the groundwater plume and is cross-gradient from the Shell Service Station; therefore, Youngdahl Consulting Group determined that the contaminant plume is unlikely to affect groundwater beneath the Project site.

It should also be noted that two additional permitted USTs in the project vicinity are located at the Laguna 76 (2323 Laguna Boulevard) and the 7-Eleven #41229 (9146 Harbour Point Drive). However, the USTs were determined not to pose an environmental risk to the Project site due to the distance of the USTs from the site and a lack of recorded leaks or violations regarding operation of the USTs.

Conclusion

Current and historical uses of the Project site do not provide evidence of RECs, CRECs, HRECs, or other risks related to potential environmental hazards. The four USTs within the project vicinity, in addition to the hazardous materials located at the nearby Apple distribution center and the groundwater plume associated with the Shell Service Station, would also not pose environmental hazards to the project site due to the distance between the hazardous sources and the project site and/or the nonexistence of reported violations or leaks. However, due to the potential for contaminated wastewater generated by Lakeside Cleaners/Martinizing Dry Cleaning to have leaked from sanitary sewer lines within Vaux Avenue, a ***potentially significant*** impact related to vapor intrusion may occur.

The Phase I ESA prepared for the Project recommends that a site-specific vapor intrusion evaluation be performed by collecting soil gas samples along the Project site boundary adjacent to Vaux Avenue, nearest to the dry cleaner location, in order to analyze the potential for dry cleaning solvents and petroleum distillates to have contaminated on-site soils. Performance of a site-specific vapor intrusion evaluation by the project applicant as recommended by Youngdahl Consulting Group and required by Mitigation Measure IX-1 below would ensure that a less-than-significant impact would occur related to the exposure of the public or environment to reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

Mitigation Measure(s)

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

IX-1. *Prior to initiation of grading activities, the project applicant shall complete an analysis of the soils along the northern Project site boundary adjacent to Vaux Avenue, nearest to the dry cleaner location, to determine whether substantial concentrations of dry cleaning solvents, petroleum distillates, 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 Development Services Department for review and approval.*

c. As discussed above, hazardous materials would not be emitted during construction or operation of the Project. The Project site is located approximately 0.5-mile north of the nearest school, Joseph Sims Elementary. Therefore, the Project would have ***no impact*** related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d. Per the SWRCB GeoTracker data management system, the Project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[17] Therefore, the Project would not create a significant hazard to the public or the environment associated with such, and ***no impact*** would occur.

e. The nearest airport to the site is the private use Borges-Clarksburg Airport, located approximately 2.37 miles west of the site. As such, the 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, ***no impact*** related to a safety hazard for people residing or working in the Project area related to such would occur.

f. As noted in the City's General Plan EIR, Elk Grove participates in the multijurisdictional Sacramento County Local Hazard Mitigation Plan (LHMP), last updated in 2016.[18] The purpose of the LHMP is to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events. The Sacramento LHMP includes policies and programs for participating jurisdictions to implement that reduce the risk of hazards and protect public health, safety, and welfare. In addition to participating in the County's LHMP, the City of Elk Grove maintains an Emergency Operations Plan (EOP) that provides a strategy for the City to coordinate and conduct emergency response. The intent of the EOP is to provide direction on how to respond to an emergency from the initial onset, through an extended response, and into the recovery process.

   The Project would not alter the existing roadway configuration in the project vicinity. Thus, the Project would not physically interfere with the LHMP or the EOP, particularly with identified emergency routes. Therefore, the Project would not interfere with an emergency evacuation or response plan, and a ***less-than-significant*** impact would occur.

g. According to the City of Elk Grove General Plan EIR, the City does not contain any areas that are designated as moderate, high, or very high Fire Hazard Severity Zones (FHSZs).[19] In addition, the Project site is surrounded by existing development and is located within an urban area within the City. Thus, the potential for wildland fires to reach the Project site would be relatively limited. Furthermore, all new development within the Project site would be required per the California Fire Code to incorporate ignition resistant construction standards such as ignition-resistant materials and design to resist the intrusion of flame or embers projected by a vegetation fire (wildfire exposure). Therefore, the Project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and a ***less-than-significant*** impact would occur.

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17 State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/. Accessed August 2020.
18 City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.8-13]. February 2019.
19 City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.11-1]. February 2019.

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. The following discussion provides a summary of the Project's potential to violate water quality standards/waste discharge requirements or otherwise degrade water quality during construction and operation.

Construction

During the early stages of Project construction activities, topsoil would be exposed due to grading, trenching for utilities, and other standard ground-disturbing activities. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality downstream.

The SWRCB regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. The City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires that subject projects must file a Notice of Intent with the SWRCB and develop a site-specific Storm Water Pollution Prevention Plan (SWPPP). A SWPPP describes Best Management Practices (BMPs) to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of

the development project. BMPs include, but are not limited to, tracking controls, perimeter sediment controls, drain inlet protection, wind erosion/dust controls, and waste management control. Because the Project would disturb greater than one acre of land, the Project would be subject to the requirements of the State's General Construction Permit.

Operation

The proposed residential uses would not involve operations typically associated with the generation or discharge of polluted water. Thus, typical operations on the Project site would not violate any water quality standards or waste discharge requirements, nor degrade water quality. However, addition of the impervious surfaces on the site would result in the generation of urban runoff, which could contain pollutants if the runoff comes into contact with vehicle fluids on parking surfaces and/or landscape fertilizers and herbicides.

The NPDES discharge requirements address waste discharge, such as stormwater, from municipal separate storm sewer systems (MS4s).[20] The City jointly participates as an MS4 permittee, together with Citrus Heights, Folsom, Galt, Rancho Cordova, Sacramento, and the County of Sacramento. NPDES permit terms are five years. The current region-wide permit (Order No. R5- 2016-0040) adopted by the Central Valley RWQCB in June 2016 allows each permittee to discharge urban runoff from MS4s in its respective municipal jurisdiction, and requires Phase I MS4 permittees to enroll under the region-wide permit as their current individual permits expire. Regional MS4 permit activities are managed jointly by the Sacramento Stormwater Quality Partnership, which consists of the seven jurisdictions covered by the permit. Under the permit, each permittee is also responsible for ensuring that stormwater quality management plans are developed and implemented that meet the discharge requirements of the permit. Under the 2016 permit, measures should be included in the stormwater quality management plans that demonstrate how new development would incorporate low-impact development (LID) design in projects. The City's Department of Public Works is responsible for ensuring its specific MS4 permit (Order No. R5-2016-0040-005) requirements are implemented. Compliance with the MS4 permit, as regulated through Chapter 15.12 of the City's Municipal Code, would ensure that impacts to water quality standards or waste discharge requirements would not occur during operation of the Project.

The Preliminary Grading and Drainage Plan prepared for the Project shows that the Project would comply with all City stormwater requirements related to water quality (see Figure 10 and Figure 11). Stormwater within the project site would be captured by a series of stormwater planters and bioswales. The stormwater planters would be located within the medians of the parking area, allowing runoff from the parking area to drain into the planters through an underground thru-sidewalk drain. The stormwater planter would treat stormwater primarily by filtering runoff slowly through an active 18-inch layer of soil and one foot of crushed rock, allowing for removal of pollutants. The bioswales would be located along the perimeters of the project site, between the proposed apartment buildings and sidewalks. The bioswales would be designed similarly to the stormwater planters, utilizing an active 18-inch layer of soil and one foot of crushed rock to filter stormwater and remove pollutants. Pavement surrounding the bioswales would be sloped at a 3:1 ratio in order to maximize stormwater capture. Following treatment within the stormwater planters and bioswales, stormwater would be captured by a drainage inlet and discharged into the City's storm drain system by way of new 12-inch storm drains.

[20] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.9-22]. February 2019.

Based on the above, the Project would comply with the water quality requirements established by Chapter 15.12 of the City's Municipal Code, the SWRCB, and the RWQCB. Therefore, during operation, the Project would comply with all relevant water quality standards and waste discharge requirements, and would not degrade water quality.

Conclusion

Based on the Preliminary Grading and Drainage Plan prepared for the Project, the Project would comply with all applicable regulations during operation, does not involve uses associated with the generation or discharge of polluted water, and would be designed to adequately treat stormwater runoff from the site prior to discharge. However, a SWPPP has not yet been prepared for the project. Without preparation of a SWPPP, proper implementation of BMPs cannot be ensured at this time, and the Project's construction activities and operations could result in an increase in erosion, and consequently affect water quality. Therefore, a ***potentially significant*** impact related to water quality and waste discharge requirements could occur. With implementation of Mitigation Measures X-1 and X-2, which would ensure that adequate BMPs are incorporated during construction and operation in accordance with SWRCB regulations, the Project would result in a less-than-significant impact with regard to violation of water quality standards and degradation of water quality.

Mitigation Measure(s)

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

X-1. *Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for review and approval by the RWRCB. The developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. Construction (temporary) BMPs for the project may include, but are not limited to: fiber rolls, straw bale barrier, straw wattles, storm drain inlet protection, velocity dissipation devices, silt fences, wind erosion control, stabilized construction entrance, hydroseeding, revegetation techniques, and dust control measures. The SWPPP shall be submitted to the Director of Public Works/City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.*

X-2. *Prior to approval of improvement plans, the Project improvement plans shall demonstrate, to the satisfaction of the City Engineer, that the Project design is compliant with the City of Elk Grove MS4 permit (Order No. R5-2016-0040-005), consistent with Chapter 15.12 of the City's Municipal Code.*

b,e. Water for the project site would be supplied by the Sacramento County Water Agency (SWCA). The SCWA pumps groundwater from the South American Sub-basin, as defined by the California Department of Water Resources (DWR) Bulletin 118. The Sacramento

Central Groundwater Authority (SCGA) manages groundwater in the Central Basin portion of the South American Subbasin within which the Project site is located. Currently, SCGA is undergoing discussions with other groundwater basin users of the South American Subbasin to evaluate options for formation of a Groundwater Sustainability Agency and development of a Groundwater Sustainability Plan (GSP), consistent with the requirements of the Sustainable Groundwater Management Act (SGMA). However, DWR has not approved a GSP for the Subbasin at this time.

Given that the project site represents a relatively small area compared to the size of the groundwater basin, the site does not currently represent a substantial source of groundwater recharge. In addition, the proposed landscaped areas within the project site would continue to allow stormwater runoff to percolate into underlying soils, thereby contributing to groundwater recharge. Although the Project would require a GPA to amend the site's current General Plan land use designation from CC to RMU, the project site has been previously designated for urban development and the loss of groundwater infiltration at the site due to development has been previously anticipated in the General Plan EIR. Overall, the Project would result in a ***less-than-significant*** impact with respect to substantially decreasing groundwater supplies or interfering substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin.

ci-iii. Per the 2015 Stormwater Drain Management Plan (SDMP), the project site is located within the Laguna West Channel watershed, which lies in the western part of the City and covers approximately 1,500 acres. The eastern part of the watershed is drained by an underground pipe system that generally conveys runoff to the west toward the Laguna West Channel. The Laguna West Channel is a constructed channel that begins just north of Laguna Boulevard and west of the Union Pacific Railroad. From that point, the channel travels north for approximately 2,400 feet to the City limits where it turns to the west and continues to Interstate 5. The channel crosses under the freeway and exists the City in three eight-foot by 12-foot box culverts and discharges into the Beach Stone Lakes area west of the freeway.

The eastern portion of the Laguna West Channel watershed is served by an underground pipe network that includes large trunk pipes up to 108-inches in diameter. The channel is also served by two detention basins. Detention Basin L-1 is located within the north end of the watershed adjacent to the Laguna West Channel and provides approximately 3.9 acre-feet (AF) of stormwater quality treatment volume and 30.1 AF of flood control storage for a tributary area of approximately 167 acres. Detention Basin L-2 is located at the upstream end of the Laguna West Channel and provides approximately 3.9 AF of stormwater quality treatment volume and 18 AF of flood control storage for a tributary area of approximately 110 acres. For all storm events, including the two-year, 10-year, and 100-year storm event, the drainage systems within the watershed are anticipated to exceed performance criteria; flooding of building pads is not anticipated to occur, and the few locations projected to experience street flooding would not experience flooding above the top of the curb. Overall, the existing major drainage facilities serving the project area are anticipated to provide adequate capacity for stormwater drainage at full buildout, and drainage improvements were not recommended for the Laguna West Channel Watershed by the 2015 SDMP.

The project site is currently undeveloped and consists of ruderal grasses that are regularly disked. Implementation of the Project would involve development of 148 multi-family

residences and associated improvements, including two large parking lots, two small clubhouses, a pool and spa, and outdoor eating and common areas. Development of the Project would result in an increase in impervious surfaces on the Project site, which would alter the existing drainage pattern of the site. As noted in the General Plan EIR, Section 16.44 of the City's Municipal Code requires projects that would increase drainage flows and have the potential to exceed the capacity of existing drainage facilities to identify, on project plans, the improvements needed to accommodate the increased flows. As noted previously, such improvements must comply with the performance standards set forth in the regional NPDES MS4 permit. As required by Mitigation Measure X-2, consistent with Section 16.44 of the Municipal Code, the Project would include appropriate site design measures, source controls, and hydraulically-sized stormwater treatment measures to limit the rate and amount of stormwater runoff leaving the site.

Stormwater draining from impervious surfaces within the project site would be captured by new stormwater planters located within the medians of the parking area and bioswales located along the perimeters of the Western and Eastern parcels. The stormwater planters and bioswales would treat stormwater primarily by filtering runoff slowly through an active layer of soil, allowing for removal of pollutants prior to discharging into existing city infrastructure. New evergreen and deciduous trees on the project site would also act as "interceptor trees," which would intercept rain water on their leaves and branches, allowing rain water to evaporate or run down the branches and trunk of the tree where it readily infiltrates into the soil.

The Drainage Study prepared for the Project by Peabody Engineering analyzed both project parcel shed areas using the Commercial Sites: LID Credits and Treatment BMP Sizing Calculations Worksheet (Appendix E).[21] Per the LID calculations, the total effective shed area managed by capture-and-use, bioretention, and/or infiltration BMPs would be approximately 0.95 acres in the Western Parcel and 0.93 acres in the Eastern Parcel. Peabody Engineering determined that the stormwater infrastructure proposed in both parcels, including the proposed interceptor trees, porous pavements, bioswales, and stormwater planters, would be sufficient to treat stormwater generated by new impervious surfaces at the project site and both parcels would be LID compliant; therefore, the entire project site meets stormwater quality requirements.

Following on-site treatment in the western parcels, stormwater from DMAs W1, W4, and W5 would be collected and outfall into the 15-inch drainage main in Vaux Avenue. DMA W2 would outfall into the 15-inch drainage main in Vaux Avenue at a separate connection. DMA W3 would outfall into the 30-inch drainage main in Laguna Main Street, and DMA W6 would outfall into the 18-inch drainage main in Renwick Avenue. Following on-site treatment in the eastern parcels, DMA E1 would outfall into the 21-inch drainage main in Vaux Avenue, and DMA E2 would outfall into the same main in Vaux Avenue at a separate connection. DMA E3 would outfall into the 30-inch drainage main in Laguna Main Street, while DMA E4 and E5 would be collected and outfall into the 18-inch drainage main in Peets Street. DMA E6 would outfall into the 24-inch main in Renwick Avenue. It should be noted that the existing drainage infrastructure within the Laguna West Channel has been determined to have sufficient capacity to provide adequate flood protection and treatment of stormwater runoff generated by the project site.

[21] Peabody Engineering. *Drainage Study Narrative for Laguna Main Apartments. City of Elk Grove, California.* February 9, 2021.

The Project's compliance with the City's regional NPDES MS4 permit and the City of Elk Grove's Stormwater Management Program would ensure that the Project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site, substantially increasing the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, or creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, a ***less-than-significant*** impact would occur.

civ. Pursuant to the General Plan EIR, in the event of dam failure, Folsom Dam and Sly Park Dam have the potential to cause flooding in the Planning Area. While the Project site is located outside of the Sly Park Dam inundation zone, the site is within the dam failure inundation zone for the Folsom Dam.[22]In 2017, the U.S. Army Corps of Engineers completed improvements to the Folsom Dam spillway on the American River to help reduce downstream flood risk.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map number 06067C0315J, the Project site is located within Zone X.[23] FEMA defines Zone X as an area located outside of the 100-year year floodplain. Therefore, the Project would not include any development within a Special Flood Hazard Area, and would not be subject to the flood damage regulations included in Chapter 16.60 of the City's Municipal Code. In addition, the Project would be consistent with General Plan Policy ER-2-2, which requires that new projects not result in new or increased flooding impacts on adjoining parcels or on upstream and downstream areas. Therefore, the Project would not impede or redirect flood flows, and ***no impact*** would result.

d. Tsunamis are defined as sea waves created by undersea fault movement, whereas a seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir. The Project site is not located within the vicinity of an ocean or a large closed body of water. Thus, the Project site would not be exposed to flooding risks associated with tsunamis or seiches. In addition, as noted above, the Project site is not located within a flood hazard zone. Therefore, ***no impact*** would occur with development of the Project.

[22] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [Figure 5.9-5]. February 2019.

[23] Federal Emergency Management Agency. *National Flood Hazard Layer.* Available at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed August 2020.

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 use so as to change the land use conditions in the surrounding community, or isolate an existing land use. The Project site does not contain existing housing or other development. In addition, the Project would be compatible with the existing residential uses to the east and west of the site. The Project would not alter the existing general development trends in the area or isolate an existing land use. Therefore, the Project would not physically divide an established community and a ***less-than-significant*** impact would occur.

b. The project site is currently designated CC per the City of Elk Grove General Plan and is zoned LC. The Project would include a rezone from LC to RMU for the project site. While the project would require a GPA to develop multi-family residential buildings on the project site, rather than commercial uses as anticipated in the General Plan, the Project would adhere to the General Plan goals, policies, and objectives regarding land use and planning, including, but not limited to, Policy LU-2-1 and Policy LU-2-4. Policy LU-2-1 promotes a greater concentration of mixed-use sites and the population along identified transit corridors and existing commercial corridors, in activity centers, and at other appropriate locations. Similarly, Policy LU-2-4 requires new infill development projects to be compatible with the character of surrounding areas and neighborhoods, support increased transit use, promote pedestrian and bicycle mobility, and increase housing diversity. The Project would comply with the aforementioned policies by providing 148 units within less than a .25-mile of Laguna Boulevard, one of the major transit corridors in the City of Elk Grove, and within 0.2-mile walking distance to Elk Grove's largest employer, Apple, which employs approximately 5,000 employees. In addition, the Project would generally be consistent with the surrounding multi-family residential uses to the west and east of the project site.

The Project would be consistent with an RMU land use designation, as the Project would provide a buffer between the commercial uses to the north and the residential uses to the east and west. The Project would promote pedestrian-oriented development by including bicycle parking infrastructure, external sidewalks, and access to major transit routes located less than 0.25-mile from the project site. Although the predominant use intended for RMU land use designations are residential uses supported by commercial or office uses, single-use residential developments are also considered appropriate within an RMU-designated area.

In addition, as discussed throughout this IS/MND, the Project would not conflict with any City policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect; for example, as discussed in Section XIII, Noise, the Project would comply with the City of Elk Grove General Plan Noise Element. Additionally, as discussed in Section IV, Biological Resources, the Project would comply with EGMC Chapter 19.12,

Tree Preservation and Protection, and Chapter 16.130, Swainson's Hawk Impact Mitigation Fees, of the Elk Grove Municipal Code. Therefore, the Project would not conflict with applicable land use plans, policies, regulations adopted for the purpose of avoiding or mitigating an environmental effect 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. According to the City's General Plan, mineral deposits or mineral extraction activities are not located within the City's Planning Area.[24] Therefore, the 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 or result in the loss of availability of a locally-important mineral resource recovery site delineated in the City's General Plan. Therefore, ***no impact*** to mineral resources would occur as a result of development of the Project.

[24] City of Elk Grove. *General Plan* [pg. 7-25]. February 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

The following discussion is based on the Environmental Noise Assessment (ENA) prepared for the proposed Project by j.c. brennan & associates, inc. (Appendix F).[25]

a. The City of Elk Grove General Plan Noise Element establishes noise level criteria for both transportation noise sources, and for non-transportation (stationary) noise sources. For transportation noise sources, the Noise Element establishes an exterior noise level standard of 60 dB Ldn and an interior noise level standard of 45 dB Ldn for residences. The exterior noise level standard is applied at outdoor activity areas to provide an acceptable noise environment for outdoor activities. The interior noise level standard is intended to provide a suitable environment for indoor communication and sleep. For stationary noise sources, the Noise Element establishes noise level performance standards of 55 dB Leq during daytime hours (7 AM to 10 PM) and 45 dB Leq during nighttime hours (10 PM to 7 AM) for typical stationary noise sources. The Noise Element includes trucking operations, shopping centers, car washes, loading docks, and HVAC systems as typical stationary noise sources.

The significance of Project-related noise impacts is also determined by comparison of project-related noise levels to existing no-project noise levels, as required by CEQA. An increase in similar noise levels of less than 3 dB is generally not perceptible. An increase of at least 3 dB in similar noise sources is usually required before most people will perceive a change in noise levels, and an increase of 5 dB is required before the change will be clearly noticeable. For this Project, an increase of more than 3 dB due to the project would be considered a significant increase in noise.

Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. In the vicinity of the Project site, the nearest existing noise sensitive land uses include the multi-family residences to the west and east

[25] j.c. brennan & associates, inc. *Laguna Main Street Apartment Environmental Noise Assessment, City of Elk Grove, California, jcb Project #2020-130*. December 22, 2020.

of the Project site. The nearest residences are located approximately 75 feet from the edge of the site, and approximately 230 feet from the center of either construction site.

Construction Noise

During the construction of the Project, heavy equipment would be used for grading, excavation, paving, and building construction, which could result in temporary noise level increases at nearby sensitive receptors. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the Project site would vary depending on the proximity of construction activities to that point. Standard construction equipment noise levels are presented in Table 7 below.

As shown in the table, construction activities would generate maximum noise levels ranging from 78 to 90 dBA at a distance of 50 feet. As noted previously, the nearest existing sensitive receptors are the single-family residences located approximately 75 feet away from the Project site and, thus, could be subjected to noise levels slightly below those presented in the table, but potentially still in excess of City standards. Table 8 shows the predicted construction noise levels for each of the project construction phases.

However, per Section 6.32.100(E) of the City's Municipal Code, noise sources associated with construction are exempt from the City's noise standards, provided such activities only occur between the hours of 7:00 AM and 7:00 PM when located adjacent to residential uses.[26]

Table 7
Construction Equipment Noise

Type of Equipment	Maximum Level, dBA at 50 feet
Backhoe	78
Compacter	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

[26] City of Elk Grove. *Municipal Code, Section 6.32.100.* Current through May 8, 2019.

Table 8
Construction Equipment Noise Levels for Construction Phases

Equipment	Quantity	Usage (%)	Maximum, Lmax (dBA at 75 feet)	Hourly Average, Leq (dBA at 75 feet)
Grading of the Site				
Backhoe	1	40	74.0	70.0
Roller	1	20	76.5	69.5
Tractor	1	40	80.5	76.5
			Total:	**78**
Foundation and Concrete Work				
Concrete Pump Trunk	1 at a time	20	77.9	70.9
Paver	1	50	73.7	70.7
			Total:	**74**
Rough Framing				
Air Compressors	2	40	74.1	70.2
Generators	1	50	77.1	74.1
Flat Bed Truck	1	40	70.7	66.7
Pneumatic Tools	3	50	81.7	78.6
			Total:	**80.6**

Source: FHWA, Roadway Construction Noise Model (RCNM), January 2006

Section 6.32.100(E) of the Municipal Code is reproduced below as follows:

> Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities only occur between the hours of 7:00 a.m. and 7:00 p.m. when located in close proximity to residential uses. Noise associated with these activities not located in close proximity to residential uses may occur between the hours of 6:00 a.m. and 8:00 p.m. However, when an unforeseen or unavoidable condition occurs during a construction Project and the nature of the Project necessitates that work in progress be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 7:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner;

Implementation of Mitigation Measure XIII-1 below specifies standards to reduce noise from construction activities consistent with Section 6.32.100 of the City's Municipal Code. In addition, noise associated with construction activities would be temporary in nature. Pursuant to the General Plan EIR, with application of Section 6.32.100(E) of the City's Municipal Code and General Plan Policy N-1-7 related to construction of City infrastructure, construction noise associated with buildout of the General Plan was determined to be less than significant.

Although construction activities are temporary in nature and would occur during normal daytime working hours, construction-related noise could result in potential impacts if construction activities were to occur outside the normal daytime hours. Therefore, impacts

resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered potentially significant.

Operational Noise

The existing noise environment in the project area is primarily defined by traffic on the local roadway network including Laguna Boulevard, Laguna Main Street and Vaux Avenue. Based upon field observations, the northern portion of the project site is heavily influenced by traffic on Laguna Boulevard. To quantify the existing ambient noise environment in the project vicinity, a continuous 24-hour noise level measurement was conducted on October 19, 2020. The noise level measurement locations are shown in Figure 14. The noise measurement survey results are provided below in Table 9.

Table 9
Summary of Measured Ambient Noise Levels

Site	Measured Ldn	Average Hourly Daytime & Evening (7:00 PM – 10:00 PM)			Average Hourly Nighttime (10:00 PM – 7:00 AM)		
		L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
A	63.5	60.6 dB	56.3 dB	73.4 dB	56.1 dB	49.6 dB	73.4 dB

Source: j.c. brennan & associates, 2020.

The measured noise levels at Site A were less than 65 dB Ldn, but exceeded the 60 dB Ldn exterior noise level standard at the northern portion of the project site. This was due to maximum noise levels associated with Laguna Boulevard.

The primary source of operational noise associated with implementation of the proposed Project would be traffic noise generated by future residents. j.c.. brennan & associates, Inc. employs the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA RD-77-108) for the prediction of traffic noise levels. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. Table 10 shows the predicted existing and existing plus project traffic noise levels on the roadway network and at the project site.

As show in Table 10, the project will not result in a significant increase in traffic noise on the local street system. In addition, the project will not result in an exceedance of the City of Elk Grove exterior noise level standards.

Figure 14
Continuous 24-Hour Noise Monitoring Site

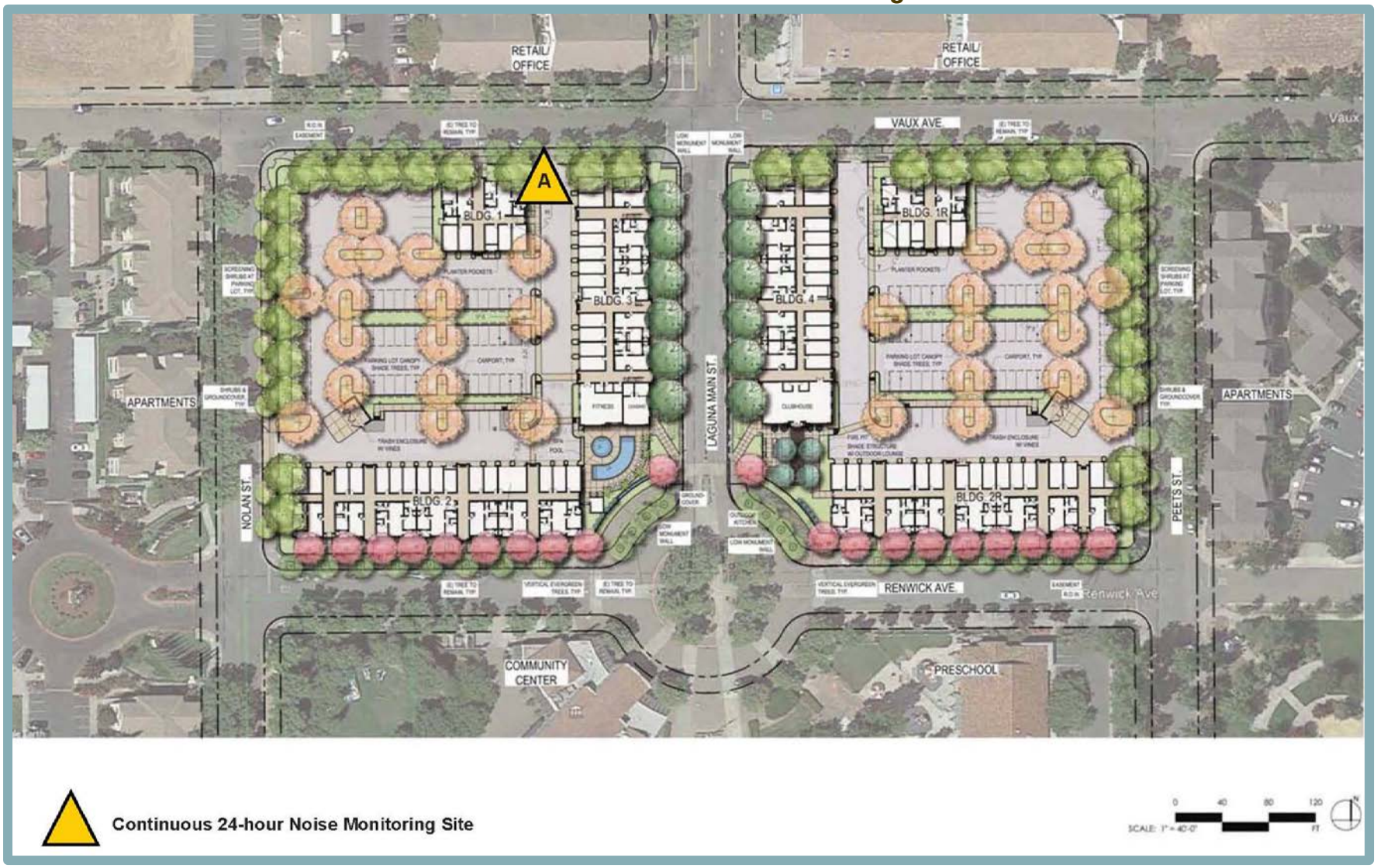

Table 10
Existing and Existing Plus Project Traffic Noise Levels

Roadway	Segment	Traffic Noise Levels (Ldn)			Distance to Noise Level Contours (feet)					
					Existing (Ldn, dB)			Existing + Project (Ldn, dB)		
		Ex. No Project	Ex. + Project	Δ	70	65	60	70	65	60
Vaux Ave.	West of Nolan St.	55 dB	57 dB	+2 dB	7	16	34	10	22	47
Vaux Ave.	Nolan St. to Laguna Main St.	59 dB	60 dB	+1 dB	15	32	69	16	35	75
Vaux Ave.	Laguna Main St. to Peets St.	57 dB	57 dB	0 dB	10	22	47	11	24	51
Vaux Ave.	East of Peets St.	56 dB	56 Db	0 dB	9	18	40	9	19	40
Peets St.	South of Vaux Ave.	56 dB	56 dB	0 dB	8	18	38	8	18	38
Laguna Main St.	North of Vaux Ave.	60 dB	60 dB	0 dB	17	37	80	19	41	88

Notes: [1] Traffic noise levels are modeled at 75 feet from the centerlines of the roadways.

Source: j.c brennan & associates, 2020.

Noise Levels at the Proposed Residences

CEQA does not require an analysis of the environment's impact on the Project; however, noise-related effects on future residents of the Project are typically evaluated to determine consistency with the policies set forth in the lead agency's General Plan. While not required under CEQA, the following section regarding off-site traffic noise and adjacent fire station noise effects on future residents is provided for informational purposes.

Exterior Noise

Table 11 shows the predicted Existing Plus Project overall noise levels at the project site, based upon the traffic modeling and the measured 24-hour noise levels. The data in Table 11 indicates that the common outdoor activity areas for the Project comply with the City of Elk Grove 60 dB Ldn exterior noise level standard. Applying the exterior noise level standard at the common outdoor activity areas is consistent with the City of Elk Grove standards as contained in Table NO-C of the General Plan. The buildings along the northern portion of the project could be exposed to traffic noise levels up to 65.0 dB Ldn.

Table 11
Predicted Existing + Project Traffic
Noise Levels on the Project Site

Location	Noise Sources	Combined Ldn
Northern Buildings	Laguna Blvd., Vaux Ave., Laguna Main Street	65.0 dB
Southern Buildings	Laguna Blvd., Vaux Ave., Laguna Main Street	57.0 dB
Clubhouse, Fitness Buildings, and Pool	Laguna Blvd., Vaux Ave., Laguna Main Street	57.5 dB
Source: j.c. brennan & associates, 2020.		

Interior Noise

Standard construction practices consistent with the uniform building code typically provide an exterior-to-interior noise level reduction of approximately 25 dBA when air conditioning is included for each unit, which allows residents to close windows for the required acoustical isolation. Because exterior noise levels will not exceed 65 dB Ldn, the interior noise levels are expected to comply with the City of Elk Grove interior noise level standard of 45 dB Ldn.

Conclusion

Based on the above, the project site would not be exposed to traffic noise levels which exceed City standards. The proposed project would not result in a significant increase in traffic noise levels on the local street system. However, noise generated by construction activities could result in potential impacts if construction activities were to occur outside the normal daytime hours. Therefore, impacts on nearby sensitive receptors resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered ***potentially significant.***

Mitigation Measure(s)

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

XIII-1. *The following measures, when applicable, shall be followed throughout all phases of construction to reduce noise from construction activities and shall be the responsibility of the construction contractor and project applicant:*

- *Construction should be limited between the hours of 7:00 AM to 7:00 PM when located in close proximity to residential uses. Noise associated with these activities not located in close proximity to residential uses may occur between the hours of 6:00 PM and 8:00 PM;*
- *Construction equipment should be well maintained and used judiciously to be as quiet as practical. Staging areas should be located in areas as far as possible from adjacent uses;*
- *Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;*

- *Utilize "quiet" models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electric-powered equipment and avoid pneumatically powered equipment where feasible;*
- *Locate stationary noise-generating equipment as far as possible from sensitive receptors. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible. Muffle or shield all intake and exhaust ports on power construction equipment;*
- *Where barriers are used to shield equipment, they should block line-of-sight between the equipment and adjacent buildings. Barriers should have a minimum density of 3 pounds per square foot. It may not be possible to construct barriers for large pieces of equipment or mobile equipment;*
- *Prohibit unnecessary idling of internal combustion engines;*
- *Ensure that no pieces of equipment (tractors, trucks, generators, radios, etc.) are started or idled prior to 7:00 AM;*
- *Ensure that delivery vehicles arrive to the project site after 7:00 AM; and*
- *Construction-related deliveries of materials and equipment should avoid residential neighborhoods to the extent possible.*

b. Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception, as well as damage to structures, have been developed for vibration levels defined in terms of PPV. Table 12 presents the effects of vibration on people and buildings. As shown in the table, and as noted in the City of Elk Grove General Plan Noise Element Policy N-1-9, the threshold of significance for architectural damage to structures is 0.20 in/sec ppv.

During Project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of construction. The range of vibration source levels for typical construction equipment are shown in Table 13 below. The nearest existing sensitive receptors are the multi-family residences located approximately 75 feet away from the site at the closest point. Based on the typical vibration levels shown in the table below, construction activities associated with the Project would not exceed 0.20 PPV at over 26 feet away. Therefore, the Project would not result in the exposure of persons to or generation of excessive groundborne vibration levels at the Project site. Additionally, construction activities would be temporary in nature and would be limited to between 7:00 AM and 7:00 PM per Chapter 6.32 of the City's Municipal Code.[27] Therefore, a ***less-than-significant*** impact would occur related to exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

[27] EGMC Section 6.32.100 states that noise sources associated with the construction, repair, remodeling, demolition, paving or grading of any real property shall be exempted from the provisions of Chapter 6.32, provided said activities only occur between the hours of 7:00 AM and 7:00 PM when located in close proximity to residential uses. However, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in progress be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 7:00 PM and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner."

Table 12
Effects of Vibration on People and Buildings

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Transportation Related Earthborne Vibrations. Caltrans. TAV-02-01-R9601. February 20, 2002.

Table 13
Vibration Levels for Various Construction Equipment

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)
Hoe Ram	0.089	0.032
Large Bulldozer	0.089	0.032
Casson Drilling	0.089	0.032
Loaded Trucks	0.076	0.027
Small Bulldozer	0.003	0.011
Jackhammer	0.035	0.012

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

c. The nearest airport to the Project site is the private use Borges-Clarksburg Airport, located approximately 2.37 miles west of the site. Given the substantial distance between the airport and the Project site, noise levels resulting from aircraft at the nearest airport would be negligible at the site. Therefore, ***no impact*** would occur related to exposing people residing or working in the Project area to excessive airport-related noise levels.

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 Project would include the development of 148 multi-family residential units. Per the General Plan EIR, the average household size for the City in 2017 was 3.29 persons per household.[28] Thus, the Project would accommodate an estimated 487 future residents (3.29 persons/household X 148 dwelling units). Per the City's General Plan EIR, buildout of the General Plan is anticipated to result in the construction of approximately 48,102 new homes within the City's Planning Area. While the Project site was not identified for buildout with residential uses in the General Plan, the total number of new residential units constructed as part of the Project would represent less than one percent of the growth anticipated in the General Plan. Thus, the Project would not be considered to result in substantial unplanned population growth.

Population growth itself does not constitute an environmental impact; rather, increased demands on the physical environment resulting from increases in population are considered environmental impacts. For example, increased demands on City services could require system upgrades, the construction of which could have environmental impacts. Physical environmental effects associated with development of the proposed Project are evaluated throughout this IS/MND. As discussed in Section XV, Public Services, of this IS/MND, the Project site is located in an urban area and is surrounded by existing development. Therefore, construction of new or expanded public services facilities would not be necessary to serve the Project. Per Section XIX, Utilities and Service Systems, the Project would not include construction of substantial new off-site utility infrastructure or expansion of existing utilities.

While the Project would result in population growth, such growth could be accommodated by existing public services and infrastructure and would not result in significant adverse environmental effects. Thus, a ***less-than-significant*** impact would occur related to inducing 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. The Project site is currently vacant and does not contain existing housing or other habitable structures. As such, the Project would not displace a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere, resulting in ***no impact.***

[28] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 3.0-2]. February 2019.

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. Fire protection services in the City of Elk Grove are provided by the Cosumnes Fire Department (CFD), which is part of the Cosumnes Community Services District (CCSD).[29] Services include fire suppression, emergency medical services, technical rescue, and arson and explosion investigations in a 157-square-mile service area covering Elk Grove, Galt, and a portion of unincorporated southern Sacramento County. The CCSD has 175 personnel in its Operations Division and operates out of eight fire stations with eight advanced life support engine companies, one aerial ladder truck company, seven rescue ambulance units, and one command vehicle, as well as other specialized apparatus for specialized emergency circumstances.[30] In 2018, the CCSD responded to 19,790 incidents, an increase from the prior four years.[31] The nearest fire station to the project site is Fire Station 75, located at 2300 Maritime Drive, to the southwest of the site.

Upon completion, the CFD would provide fire protection services to the proposed residential development. The General Plan EIR concluded that while buildout of the Planning Area, including the Project site, would result in an increased demand for fire protection and emergency medical services, compliance with applicable regulations and General Plan policies would ensure that new fire station siting and resources are available, and that required environmental review under CEQA would be conducted as specific fire protection facilities are proposed. As noted in the General Plan EIR, three new fire stations are currently planned within the City's Planning Area: Station 77, to be located within the Laguna Ridge Specific Plan Area near Whitelock Parkway; Station 78, to be located within the South Pointe Land Use Policy Area near Kammerer Road; and Station 79, to be located within the Eastern Elk Grove Community Plan Area near Grant Line Road. Therefore, demand for fire protection facilities associated with the Project could either be met by the existing Fire Station 75 or by future fire station facilities planned by the City.

The Project would be subject to payment of a fire impact fee in accordance with Chapter 16.95 of the City's Municipal Code, which is used to pay for costs associated with development of new fire stations. Furthermore, the proposed buildings would be constructed in accordance with the fire protection requirements of the most recent California Fire Code. The CCSD would review the Project building plans to ensure

[29] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.11-1]. February 2019.
[30] Cosumnes Fire Department. *Operations Division*. Available at: https://www.yourcsd.com/469/Operations-Division. Accessed August 2020.
[31] Cosumnes Fire Department. *2018 Annual Report*. 2020.

compliance with all code requirements. Based on the above the Project would have a ***less-than-significant*** impact related to the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts.

b. Police protection services within the City of Elk Grove are provided by the City of Elk Grove Police Department (EGPD). As noted in the General Plan EIR, the EGPD operates primarily out of two facilities located in the City Hall complex at 8380 and 8400 Laguna Palms Way. The service area is split into five police beats that are regularly patrolled. As of 2017, the EGPD has an authorized strength of 141 sworn officers and 86 civilian personnel and responds to an average of 52,000 calls for service per year. In addition to the EGPD, the California Highway Patrol (CHP) provides traffic regulation enforcement, emergency accident management, and service and assistance on State roadways, as well as traffic regulation enforcement throughout the State (including in the City), from its station located at 6 Massie Court, near the interchange of Mack Road and State Route 99.

The General Plan EIR concluded that while buildout of the Planning Area, including the Project site designated as commercial, would result in an increased demand for law enforcement services, resulting in new patrols, identified growth areas within the City will be adequately served by the EGPD's existing facilities, and construction of new facilities is not likely to be required. While the General Plan designates the Project site for commercial development, as opposed to the residential development proposed as part of the Project, the Project would not result in substantially increased demands for law enforcement services relative to buildout of the site under the current CC land use designation. In addition, any upgrades to law enforcement facilities and/or equipment to provide adequate law enforcement services to new development would be funded by the City's Capital Facilities Fee levied on new development, as well as ongoing payments of property taxes, which are typically used to hire additional law enforcement staff if necessary.

Given required payment of the City's Capital Facilities Fee consistent with Chapter 16.95 of the City's Municipal Code, the Project would have a ***less-than-significant*** impact related to the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts.

c. School services in the City are provided by the Elk Grove Unified School District (EGUSD). As noted in the General Plan EIR, the EGUSD provides education to over 62,000 students and operates 66 schools: 42 elementary schools, nine middle schools, nine high schools, one alternative education school, four continuation schools, and one special education school. Enrollment at the EGUSD has remained relatively constant since the 2011/12 school year.

The Project would include the development of the project site with a total of 148 residential units and, thus, would increase demand for school facilities and services. The EGUSD collects development fees for new residential projects on a per square foot basis. The development fees serve to offset school facility costs associated with serving new students. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act…involving …the planning, use, or development of real property" (Government Code 65996(b)). Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." Therefore,

because the Project applicant would be required to pay development fees to the EGUSD, the Project would result in a ***less-than-significant*** impact regarding an increase in demand for schools.

d,e. Parks and recreation services within the City are provided by the CCSD through the CCSD's Parks and Recreation Department. The CCSD plans and designs new parks, owns, operates, and maintains parks and community centers, manages rentals of community centers, picnic sites, and sports fields, and offers recreation programs; recreational opportunities offered by the CCSD include, but are not limited to, 97 parks, 21 miles of trails, 36 multipurpose sports fields, two aquatic centers, and eight recreation buildings as of 2018. The project site is located across the street from Bartholomew Park, which is an approximately 10-acre park consisting of multi-purpose soccer fields, scenic lake views, shaded picnic areas, and walking paths.[32]Other parks within a one-mile vicinity of the project site include Velma & Lester King Park, Hawkins Park, Lawson Park, and Lawrence Park. In addition, the Project would include on-site recreational amenities, including a community pool, spa, and fitness center within the Western Parcels, and a community clubhouse, firepit, and outdoor lounge within the Eastern Parcels. While the Project could result in a slight increase in population and subsequent demand on recreational facilities, the on-site recreational facilities included in the Project would help to meet that increase in demand.

As discussed in Section XIV, Population and Housing, of this IS/MND, the Project would house an estimated 487 future residents. Because of the size and number of existing parks in the immediate vicinity of the project site, 487 new residents would not be expected to require the need for new or physically altered parks or other public facilities, the construction of which could cause significant environmental impacts, because of the scope and availability of surrounding parks in the immediate vicinity of the project site. Therefore, a ***less-than-significant*** impact would occur.

[32] Consumnes Community Services District. *Bartholomew Park.* Available at: https://www.yourcsd.com/578/Bartholomew-Park. Accessed January 2021.

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. Development of the Project would result in an increase in population in the area, which could increase the use of existing parks and/or the demand for new neighborhood or community parks and recreation facilities in the area. However, the Project would include on-site recreational amenities, including a community pool, spa, and fitness center within the Western Parcels, and a community clubhouse, firepit, and outdoor lounge within the Eastern Parcels. While the Project could result in a slight increase in population and subsequent demand on recreational facilities, the on-site recreational facilities included in the Project would help to meet that increase in demand.

As discussed under Section XV, Public Services, of this IS/MND, parks and recreation services within the City are provided through the CCSD's Parks and Recreation Department. Recreational opportunities offered by the CCSD include, but are not limited to, 97 parks, 21 miles of trails, 36 multipurpose sports fields, two aquatic centers, and eight recreation buildings as of 2018. The project site is located across the street from Bartholomew Park, which is a 10-acre park consisting of multi-purpose soccer fields, scenic lake views, shaded picnic areas, and walking paths. Other parks within a one-mile vicinity of the project site include Velma & Lester King Park, Hawkins Park, Lawson Park, and Lawrence Park.

As discussed in Section XIV, Population and Housing, of this IS/MND, the Project would house an estimated 487 future residents. Because of the size and number of existing parks in the immediate vicinity of the project site, and because the proposed project would provide on-site recreational amenities, the increase in population associated with the Project would not be expected to result in substantial physical deterioration of any existing neighborhood or regional parks or other recreational facilities, and would not result in adverse physical effects related to the construction or expansion of new facilities. Thus, a ***less-than-significant*** impact would occur.

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?	☐	☐	✖	☐

Background

The following is based on a Traffic Analysis Memorandum prepared for the Project by Fehr & Peers (Appendix G).[33] The Traffic Analysis evaluates the consistency of the Project with the City's policies and the impacts of the Project in accordance with the standards set forth by the City.

Discussion

a. This section discusses any potential conflict between the Project and any applicable programs, plans, ordinances, or policy addressing the circulation system. This includes all modes of transportation, including transit, roadway, bicycle, and pedestrian facilities.

In preparing the Traffic Analysis, Fehr & Peers considered applicable aspects of the Project, including the land use mix and design of the Project and roadway segments and intersections around and proximate to the Project. Specifically, the following intersections were considered in the analysis:

1. Vaux Avenue/Nolan Street
2. Vaux Avenue/Laguna Main Street
3. Vaux Avenue/Peets Street

As indicated in the TIS, the Project would not significantly increase intersection delay beyond City standards, and all study intersections would continue to operate at acceptable levels even with buildout of the proposed project. In addition, the Project applicant would be required to pay the applicable I-5 Subregional Fee in effect at the time of payment, consistent with Sections 16.97.040 and 16.97.050 of the City's Municipal Code. The I-5 Subregional Fee program was developed between the City, the cities of Sacramento and West Sacramento, and Caltrans. Policy MOB-7-4 in the City General Plan requires development applications to pay this fee in order to fund the necessary improvements.

Consistency with City of Elk Grove General Plan Policies - Transit, Bicycle, and Pedestrian Facilities

The following section discusses the availability of bicycle and pedestrian facilities and transit service and facilities in the Project area.

Pedestrian and Bicycle Facilities

The Laguna West community has a robust pedestrian network, including sidewalks along most internal roadways and pedestrian connections to Bartholomew Park, Lawson Park,

[33] Fehr & Peers. *Laguna Main Street Apartments IS/MND – Transportation Analysis.* November 18, 2020.

Velma & Lester King Park, Hawkins Park, and more. Sidewalks are present along all frontages of the proposed project site. Primary access from Laguna Boulevard to the proposed project would be along Laguna Main Street, Haussman Street, and Gropius Street. Laguna Main Street and Haussman Street have continuous sidewalks along both frontages connecting the proposed project to Laguna Boulevard. Sidewalks are present along the western frontage of Gropius Street; however, the eastern frontage between Laguna Boulevard and Vaux Avenue does not currently have sidewalks. The City of Elk Grove Improvement Standards require a minimum of five-foot sidewalk included with new development along residential and collector streets; therefore, it is anticipated that a sidewalk would be constructed along the eastern frontage upon development of the parcel. In addition, the City of Elk Grove maintains three classes of bicycle facilities (Class I, Class II, and Class III). A new crosswalk would also be constructed across Vaux Avenue to provide access to relocated east- and west-bound bus stops which are discussed in further detail below. In addition, designated bike lines near the project site are located along Laguna Boulevard and Harbour Point Drive, and designated bike routes near the project site are located on Babson Drive and Lakepoint Drive. Overall, the proposed project is not anticipated to generate pedestrian and bicycle traffic substantial enough to exceed the capacity of existing pedestrian and bicycle facilities.

Transit Service and Facilities

The proposed project would relocate the existing bus shelter and exiting bus sign on the south side of Vaux Avenue to the east near the corner of Peets Street and would include a near concrete pad in the parkway. The existing bus stop on the north side of Vaux Avenue would also be moved to the east with a new concrete pad and relocated bus sign. As mentioned previously, a cross walk across Vaux Avenue and a new curb ramp on the north side of Vaux Avenue between the existing trees would be included to promote pedestrian access to the three-way east- and west-bound bus stop.

Transit services in the City of Elk Grove are provided by E-tran, which is operated by Sacramento Regional Transit (SacRT). Multiple bus stops are located near the project site, including a sheltered bus stop along the northern frontage of the project site east of Laguna Main Street and an unsheltered bus stop along the southern side of the Laguna West Plaza east of Laguna Main Street. Bus routes that serve the area include Commuter Route 14 and Local Routes 111, 112, 113, and 114. Commuter Route 14 operates Monday through Friday during the AM peak period from approximately 5:45 AM to 8:15 AM and during the PM peak period from approximately 3:45 PM to 6:15 PM with 30-minute headways. Local Routes 111 and 112 operate Monday through Friday between approximately 6:00 AM and 8:30 PM with hourly headways in each direction. Local Routes 113 and 114 operate Monday through Friday between approximately 6:00 AM and 8:15 PM with hourly headways in each direction and between 7:00 AM and 6:15 PM on Saturdays with one and a half hour headways in each direction. Therefore, existing transit services and facilities contain sufficient capacity to accommodate potential transit users at the proposed project.

Conclusion

Based on the above, the Project would not increase vehicle traffic such that the capacity of surrounding roadways or intersections would be exceeded, nor would the Project generate significant traffic so as to exceed the capacity of existing pedestrian, bicycle, or transit facilities. Therefore, the Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, taking into account all modes of transportation, including transit, roadway, bicycle, and pedestrian facilities. Thus, a ***less-than-significant impact*** would occur.

b. Pursuant to General Plan Policy MOB-1-1, new development projects are required to demonstrate a 15 percent reduction in VMT from 2015 conditions. To demonstrate this reduction, conformance with following land use and cumulative VMT limits is required:

1. Development projects shall demonstrate that the VMT produced by the project at buildout is equal to or less than the VMT limit of the project's General Plan land use designation, as shown in Table 6-1 of the General Plan, which incorporates the 15 percent reduction from 2015 conditions; and
2. Development projects located within the existing City limits shall demonstrate that cumulative VMT within the City, including the project, would be equal to or less than the established Citywide limit of 6,367,833 VMT (total daily VMT).

As part of the Traffic Analysis prepared for the Project, Fehr & Peers developed origin-destination/tour-based transportation analysis VMT forecasts using the modified version of the Sacramento Area Council of Governments (SACOG) SACSIM regional travel demand forecasting model, developed for the City of Elk Grove General Plan Update and subsequently updated for the City's transportation impact fee program. The City of Elk Grove uses VMT per service population and daily VMT as the basis for VMT analysis. VMT per service population includes the sum of all vehicle miles travelled produced by individual land uses in a Project, divided by the sum of total residents living in the Project. The VMT per service population metric is used to assess a Project against specific land use VMT limits. Total daily VMT includes the sum of all vehicle miles travelled produced by all uses within the applicable study area. Because the Project is located within the city limits of Elk Grove, Fehr & Peers used the citywide cumulative VMT limit that is outlined in Policy MOB-1-1(a)(ii) to assess the Project.

As mentioned previously, the VMT produced by the Project at buildout must be equal to or less than the VMT limit of the underlying land use designation. The Project is proposing a GPA from CC to RMU; however, because the Project is proposing a high-density residential use, Fehr & Peers compared Project VMT to that of the High-Density Residential land use designation. Such a comparison would be considered conservative, given that the VMT limits for High-Density Residential land uses are lower than that of RMU land uses (20.6 and 21.2, respectively). Given a VMT limit of 20.6, the Project is anticipated to produce a VMT per service population of 20.2. Thus, the Project would not exceed the City's VMT limit for the proposed RMU land use designation or the High-Density Residential land use designation. In addition, Fehr & Peers determined that cumulative VMT within the City, including the Project, would be 6,366,759, which would be less than the City's established total VMT limit of 6,367,833.

Based on the above, the Project would not cause a new exceedance of the citywide limit or conflict with the VMT limits established by General Plan Policy MOB-1-1. Therefore, the Project would not conflict with CEQA Guidelines section 15064.3, subdivision (b) and a ***less-than-significant*** impact would occur.

c,d. As part of the Traffic Analysis, Fehr & Peers evaluated the potential for hazards to occur at the Project site due to a geometric design feature or interactions between adjoining uses, as well as the potential for inadequate emergency access. The findings of the TIA regarding these impact areas are summarized herein.

The City of Elk Grove Improvement Standards Manual outlines the following driveway standards applicable to the proposed Project:

- All driveways along two-lane streets, except those providing access to single-family residential uses, shall have a minimum throat depth of 25 feet;
- Commercial, office, and multi-family driveways on collector streets shall have a minimum opening of 24 feet; and,
- Residential driveways along minor street or collector streets at their intersection with a 50-foot back of curb to back of curb or narrower street shall be located a minimum of 15 feet clear from the corner return.

Upon review of the Project site plans, Fehr & Peers determined that the driveway throat depth for the proposed driveways along Vaux Avenue would be approximately 80 feet, and the driveway throat depth for the proposed driveways along Nolan Street and Peets Street would be approximately 30 feet. Therefore, all proposed driveways would exceed the minimum 25-foot throat depth requirement. In addition, the proposed driveways would be approximately 26 feet wide in compliance with the minimum 25-foot throat depth requirement. Furthermore, the proposed driveways would be located at least 15 feet from the corner returns of adjacent intersections and, therefore, would comply with the minimum requirement.

Using a swept path analysis to evaluate the adequacy of the proposed driveways and on-site circulation systems, Fehr & Peers determined that the site plan has been designed to accommodate delivery vehicles and refuse vehicles. In addition, the project site plan provides for 25 to 50 feet fire turning radii within the internal drive aisles to allow for emergency vehicle access. The Project does not include modifications of the surrounding roadways, bicycle lanes, or pedestrian sidewalks, and does not include potentially hazardous geometric design features.

Therefore, the Project would not substantially increase hazards due to geometric design features or incompatible uses, and emergency access to the site would be adequate. Therefore, the Project would result in a ***less-than-significant impact.***

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. As discussed in Section V, Cultural Resources, of this IS/MND, the project site is located in the ethnographic-period territory of the Plains Miwok, a tribe which inhabited the lower reaches of the Mokelumne and Cosumnes River and both banks of the Sacramento River from Rio Vista to Freeport. The Project area is situated in the Sacramento Valley approximately 0.5-mile northeast of intermittent streams.

A search of the CHRIS database concluded that two recorded historic-period cultural resources have been identified within a 0.25-mile radius of the project site. However, development of the project site is not anticipated to impact these off-site resources. In addition, the CHRIS search found that the project site contains one recorded prehistoric-period resource and one recorded historic-period cultural resource, identified as Sacramento River Tribal Cultural Landscape. As mentioned previously in Section V, Cultural Resources, of this ISMND, although the landscape is considered a culturally significant natural landscape for its association with the cultural practices and beliefs of the Nisenan and Plains Miwok, the landscape on the project site has been heavily altered over the past century and no longer contains character-defining elements (waterways, tule, fisheries, and other wildlife) to convey the significance of the resource. In addition, a search of the Sacred Lands File conducted through the Native American Heritage Commission returned negative results for the potential for known tribal cultural resources to exist on the project site. Therefore, while the potential exists for locating historic-period cultural resources, including tribal cultural resources, in the immediate vicinity of the project area, impacts to such resources are not anticipated.

In compliance with Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1), on October 26, 2020, the City provided formal notification letters to the following tribes that had requested notification: the Buena Vista Rancheria of Me-Wuk Indians, the Chicken Ranch Rancheria of Me-Wuk Indians, the Ione Band of Miwok Indians, the Nashville Enterprise Miwok-Maidu-Nishinam Tribe, the United Auburn Community of the Auburn Rancheria, and the Wilton Rancheria. Requests for consultation from the contacted tribes have not been received by the City to date.

Given the extent of known cultural resources and the environmental setting, the NCIC determined that a low potential exists for locating known prehistoric-period cultural resources in the immediate vicinity of the Project area; however, the potential exists for the proposed project to cause a substantial adverse change in the significance of unknown subsurface tribal cultural resources, and a ***potentially significant*** impact may occur. Implementation of Mitigation Measure XVIII-1 would ensure that if previously unknown tribal cultural resources are encountered during construction activities, the Project would not cause a substantial adverse change in the significance of the tribal cultural resource during construction. Therefore, impacts would be considered less than significant with mitigation incorporated.

Mitigation Measure(s)

Implementation of the following mitigation measure, which refers to the mitigation measures presented previously in Section V of this IS/MND, would reduce the above impact to a *less-than-significant* level.

XVIII-1. Implement Mitigation Measures V-1, V-2, and V-3.

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. The sections below describe the wastewater and water supply infrastructure necessary to serve the Project.

Wastewater Infrastructure

Sewer service for the Project would be provided by the SASD by way of new six-inch sewer lines connecting to new sewer manholes within the southwestern and northern portions of the Western Parcel. In addition, six-inch sanitary sewer lines would be routed to eventually connect to new sewer manholes within the eastern and northern portions of the Eastern Parcel. The new on-site sewer lines would connect to existing sewer lines within several of the surrounding roadways, including Renwick Avenue, Vaux Avenue, Nolan Street, and Peets Street. The SASD is a contributing agency to the Sacramento Regional County Sanitation District (Regional San).

The SASD owns, operates, and maintains a network of 107 pump stations and approximately 80 miles of pressurized force main pipes.[34] SASD trunk sewer pipes function as conveyance facilities to transport the collected wastewater flows to the Regional San interceptor system. The existing City trunk line extends southeast from the Sacramento Regional Wastewater Treatment Plant (SRWTP) influent diversion structure to Laguna Boulevard, then parallel to SR 99 along East Stockton Boulevard, extending close to the southern boundary of the City of Elk Grove.

According to the General Plan EIR, the SRWTP treats an average of 181 million gallons of wastewater per day (mgd). Wastewater is treated by accelerated physical and natural

[34] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.12-26]. February 2019.

biological processes before discharge to the Sacramento River. The SRWTP's reliable capacity is currently limited, based on hydraulic considerations, to an equivalent 207 mgd average dry weather flow (ADWF). This existing capacity falls short of the 218 mgd ADWF projected for 2020 per the Sacramento Regional Wastewater Treatment Plant 2020 Master Plan. Therefore, the SRWTP has been master planned to accommodate 350 mgd ADWF. In addition, Regional San has prepared a long-range master plan for the large-diameter interceptors that transport wastewater to the SRWTP. The master plan includes interceptor upgrades/expansions to accommodate anticipated growth through 2035.[35]

The Project would require a GPA from CC to RMU. Using the General Plan EIR's assumption of 310 gallons of wastewater per day per residential dwelling unit, operation of the Project would contribute a total of 45,880 gallons of wastewater per day (0.045 mgd). Although the Project would contribute more wastewater than what would be anticipated with commercial uses, the estimated wastewater generation from the Project would not be anticipated to exceed the capacity of existing city wastewater infrastructure in consideration of the aforementioned proposed infrastructural improvements identified by the SRWTP Master Plan and General Plan EIR. Furthermore, the Project applicant would be required to pay sewer impact fees to the sewer district, which would contribute towards the cost of future upgrades of the SRWTP. Required payment of sewer impact fees would ensure that the SRWTP receives adequate funding for necessary future improvements. It should also be noted that, per the SRWTP's NPDES Permit (No. CA0077682), adopted in April of 2016, the ADWF at that time was approximately 120 mgd.[36] As such, the SRWTP was operating at approximately 63 percent of permitted capacity. Therefore, adequate capacity exists to treat the additional 0.045 mgd of wastewater that would be generated by the proposed Project, and a less-than-significant impact would occur related to construction of new or expanded wastewater facilities.

Water Supply Infrastructure

The City of Elk Grove is served by three water service providers: the SCWA; the Elk Grove Water District; and the Omochumne-Hartnell Water District. As noted above, the Project would be served by the SCWA. The SCWA uses purchased water, surface water, groundwater, and recycled water as sources of water supply. The site is located within the SCWA's 40/41 service area and within the 2030 Water Supply Master Plan (WSMP) study area.

Since approval of the WSMP, the SCWA has produced amendments to the WSMP for the following areas: Cordova Hills (approved 2011), Jackson Township (pending approval), New Bridge (pending approval), and West Jackson (pending approval). In 2016, SCWA also developed the Water System Infrastructure Plan (WSIP). The WSIP is a staff-level document that describes the projected water supply infrastructure needs to meet the projected built-out water demands in Zone 40, including the demands associated with buildout of the Project site. Subsequently, the 2015 Urban Water Management Plan (UWMP) was developed based on water demand and supply information provided in the WSIP. Thus, the 2015 UWMP demand projections include the estimated demands associated with buildout of the Project site.

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35 City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.12-27]. February 2019.

36 California Regional Water Quality Control Board, Central Valley Region. Order No. R5-2016-0020-01 NPDES No. CA0077682 [pg I-7]. April 2016.

The City of Elk Grove's General Plan EIR estimated that CC land uses would be expected to generate 2.02 acre-feet (AF) of water per acre per year. The project site consists of approximately 5.86 acres; therefore, the existing land use designated for the project site would be anticipated to generate approximately 11.84 AF of water per year (AFY). The Project would require a GPA from CC to RMU. RMU land uses are estimated to generate approximately 2.15 AF of water per acre per year, bringing the total estimated water demand for the Project to 12.60 AFY for a 5.86-acre project.[37] Thus, the difference in water demand between the existing and proposed land uses is approximately 0.76 AF, or 247,647 gallons of water per year. Although the Project would represent an increase in water demand than what has been accounted for in the City's General Plan, 0.76 AF would not be considered a substantial increase in light of SWCA's projected 35,659 AF water surplus for 2020 and an 18,853 AF water surplus by 2040. Furthermore, SWCA anticipates that the retail supply of water would slightly increase between 2020 and 2040 due to increases in groundwater pumping. Therefore, SCWA's water supplies would be sufficient to satisfy water demands associated with the Project while still meeting the current and projected water demands of existing customers within the SCWA service area.

Water supply to the proposed development would be provided by the SCWA by way of new four to eight-inch water lines located within the Eastern and Western parcels. The new water lines within the Western Parcel would connect to an existing 12-inch water line in Nolan Street, while the new water lines within the Eastern Parcel would connect to an existing 12-inch water line in Peets Street. Given that the Project would connect to existing water supply lines located in the Project vicinity, construction of substantial off-site water supply infrastructure would not be required. Although the Project would require a GPA to change the site's land use designation from CC to RMU and a Rezone from LC to RMU, construction of on-site water supply improvements associated with urban development has been previously anticipated by the City and analyzed in the General Plan EIR.

The General Plan EIR concluded that buildout of the General Plan, including the project site, would result in a significant and unavoidable impact related to water supplies. However, based on the above, sufficient water supplies would be available to serve the Project and reasonably foreseeable future development. In addition, the construction of new or expanded water supply facilities would not be required to supply water to the proposed project. Consequently, a ***less-than-significant impact*** would occur.

Stormwater Infrastructure

The Project site is currently undeveloped vacant land with ruderal vegetation. Completion of the Project would increase site runoff due to the introduction of impervious surfaces to the site. As discussed in further detail in Section X, Hydrology and Water Quality, of this IS/MND, the SWPPP for the Project would conform with the most recent Sacramento County Stormwater Quality Design Manual and comply with all City stormwater requirements. In compliance with the C.3 Guidebook, stormwater within the project site would be captured by a series of stormwater planters and bioswales. The stormwater planters would be located within the medians of the parking area, while the bioswales would be located along the perimeter of each parcel. The stormwater planter and bioswales would treat stormwater primarily by filtering runoff slowly through an active layer of soil, allowing for removal of pollutants. Following treatment within the stormwater planter and bioswales, stormwater would be discharged into the City's storm drain system by way of new 12-inch storm drains connecting to existing 15- to 30-inch storm drains within the

[37] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.12-22]. February 2019.

surrounding roadways, including Renwick Avenue, Nolan Street, Peets Street, and Vaux Avenue. Because the proposed stormwater planters and bioswales would be designed with adequate capacity to capture and treat runoff from proposed impervious surfaces, the Project would not generate runoff in excess of the City's existing stormwater system's capacity. Therefore, the Project would have a less-than-significant impact with respect to requiring or resulting in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Electricity, Natural Gas, and Telecommunications Facilities

The Project site is located within a developed area of the City of Elk Grove and is situated within close proximity to existing electric power, natural gas, and telecommunications facilities. Thus, substantial expansion of such off-site utilities would not be required to serve the proposed development, and associated environmental effects would not occur.

Conclusion

Based on the above, sufficient water supplies would be available to serve the Project, and sufficient infrastructural capacity exists to accommodate the water, wastewater, stormwater, and dry utilities demands associated with the proposed project. Therefore, a ***less-than-significant impact*** would occur related to requiring or resulting in 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, or resulting in a determination by the wastewater treatment provider which serves the Project that it has adequate capacity to service the Project's projected demand in addition to the provider's existing commitments.

d,e. Republic Services provides solid waste collection, disposal, recycling, and yard waste services to residential development within the City of Elk Grove. Solid waste generated by commercial and multifamily residential developments is served by registered commercial haulers or county-authorized recyclers. As noted in the General Plan EIR, the City is served by a total of ten landfills, the majority of which have over 60 percent available remaining capacity.[38] The Project would require a GPA from CC to RMU, which would be anticipated to generate more solid waste than the current land use designation. Using the General Plan EIR's annual estimate of 1.08 tons of solid waste per resident, the Project would be anticipated to generate approximately 525.96 tons of solid waste per year. Due to the substantial amount of available capacity remaining at the landfills serving the City, the increase in solid waste generation would not be anticipated to exceed landfill capacity. As noted in the General Plan EIR, the City of Elk Grove generates less solid waste per capita than the State's diversion requirement, with solid waste generation estimated to be as low as 241,733 tons per year. Therefore, the Project would not be anticipated to 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.

In addition, the Project would be required to comply with all applicable solid waste regulations, including Title 30, Solid Waste Management, of the City's Municipal Code, as well as Chapter 30.90, the City's Space Allocation and Enclosure Design Guidelines for Trash and Recycling. Section 30.10.140 requires all residents within the City of Elk Grove to transport and deliver all solid waste only at sites or facilities that are allowed to accept

[38] City of Elk Grove. *General Plan Update Draft Environmental Impact Report* [pg. 5.12-32]. February 2019.

that solid waste under solid waste law, such as permitted transfer stations, landfills, materials recovery facilities, composting facilities, and recyclables buy-back centers., Chapter 30.90 also requires applicants to develop and submit an integrated waste management plan as part of the land use permit process. The plan shall demonstrate steps the applicant would take to meet the State mandate to reduce or divert 65 percent of the waste generated by all residences and businesses in the City. Therefore, the Project would comply with applicable federal, state, and local management and reduction statutes and regulations related to solid waste.

Based on the above, a ***less-than-significant*** impact related to solid waste would occur as a result of the Project.

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. According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program, the Project site is not located within or near a Very High Fire Hazard Severity Zone or State Responsibility Area.[39] As such, the proposed Project would not be expected to be subject to or result in substantial adverse effects related to wildfires, and a ***less-than-significant*** impact would occur.

[39] California Department of Forestry and Fire Protection. *Sacramento County, Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE*. July 30, 2008.

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, implementation of the Project would have the potential to result in adverse effects to burrowing owl, white-tailed kite, Modesto song sparrow, Swainson's hawk, and migratory birds and raptors protected by the MBTA. In addition, while unlikely, the Project could result in impacts related to eliminating important examples of major periods of California history or prehistory associated with undiscovered archeological and/or paleontological resources during Project construction. However, the Project would be required to comply with applicable General Plan policies and Municipal Code regulations related to biological and cultural resources, including Chapter 7.00, Historic Preservation, of the Municipal Code. In addition, this IS/MND includes mitigation measures that would reduce any potential impacts to less-than-significant levels.

With implementation of the mitigation measures required by this IS/MND, as well as compliance with General Plan policies and all applicable sections of the Municipal Code, development of the Project would reduce any potential impacts associated with the following: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, with implementation of the mitigation measures included in this IS/MND, a ***less-than-significant impact*** would occur.

b. The Project in conjunction with other development within the City of Elk Grove 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 with implementation of project-specific mitigation measures and compliance with applicable General Plan policies. As discussed in Section XVII of this IS/MND, while the Project would include

generation of vehicle trips on area roadways, the cumulative VMT associated with development of the Project and other existing and planned development within the City of Elk Grove would be below the established city-wide VMT threshold. As noted in Section VIII-1, Mitigation Measure VIII-1 would ensure Project consistency with the City's CAP, thereby resulting in a less-than-significant impact related to cumulative GHG emissions.

When viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the Project would not result in a cumulatively considerable contribution to cumulative impacts in the City of Elk Grove, and the Project's cumulative impact would be ***less than significant***.

c. As described in this IS/MND, the Project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local and State regulations, and mitigation measures included herein. In addition, as discussed in the Air Quality, Geology and Soils, Hazards and Hazardous Materials, Greenhouse Gas Emissions, and Noise sections of this IS/MND, the proposed Project would not cause substantial effects to human beings, which cannot be mitigated to less-than-significant levels, including effects related to exposure to air pollutants, geologic hazards, GHG emissions, hazardous materials, and excessive noise. As such, the Project would not result in direct or indirect impacts to human beings and, thus, the Project's impact would be ***less than significant***.

APPENDIX A

AIR QUALITY AND GHG MODELING RESULTS

Laguna Main Street Apartments

Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	250.00	Space	2.25	100,000.00	0
Apartments Mid Rise	148.00	Dwelling Unit	3.55	148,000.00	395

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	387.1	**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 adjusted based on SMUD's RPS reductions.

Land Use - Residential lot acreage adjusted based on total site acreage.

Construction Phase - Schedule adjusted based on applicant-provided information.

Grading - Grading adjusted per applicant-provided AQ questionnaire.

Vehicle Trips - Trip rate adjusted based on F&P Traffic Study.

Area Mitigation - Per applicant-provided information, hearths would not be installed.

Energy Mitigation - Title 24 exceedance applied to represent compliance with the 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CALGreen Code and MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	360.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	2.00
tblConstructionPhase	NumDays	10.00	2.00
tblGrading	AcresOfGrading	5.00	5.80
tblLandUse	LotAcreage	3.89	3.55
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.1
tblVehicleTrips	ST_TR	6.39	5.03
tblVehicleTrips	SU_TR	5.86	5.03
tblVehicleTrips	WD_TR	6.65	5.03

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.6370	1.9787	2.0057	4.2100e-003	0.1717	0.0936	0.2653	0.0592	0.0883	0.1475	0.0000	372.7767	372.7767	0.0574	0.0000	374.2125
2022	0.8084	2.0579	2.3306	4.9900e-003	0.1506	0.0913	0.2419	0.0405	0.0864	0.1269	0.0000	442.2481	442.2481	0.0644	0.0000	443.8590
Maximum	**0.8084**	**2.0579**	**2.3306**	**4.9900e-003**	**0.1717**	**0.0936**	**0.2653**	**0.0592**	**0.0883**	**0.1475**	**0.0000**	**442.2481**	**442.2481**	**0.0644**	**0.0000**	**443.8590**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.6370	1.9787	2.0057	4.2100e-003	0.1717	0.0936	0.2653	0.0592	0.0883	0.1475	0.0000	372.7765	372.7765	0.0574	0.0000	374.2122
2022	0.8084	2.0579	2.3306	4.9900e-003	0.1506	0.0913	0.2419	0.0405	0.0864	0.1269	0.0000	442.2478	442.2478	0.0644	0.0000	443.8587
Maximum	**0.8084**	**2.0579**	**2.3306**	**4.9900e-003**	**0.1717**	**0.0936**	**0.2653**	**0.0592**	**0.0883**	**0.1475**	**0.0000**	**442.2478**	**442.2478**	**0.0644**	**0.0000**	**443.8587**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2021	7-31-2021	0.9528	0.9528
2	8-1-2021	10-31-2021	1.0096	1.0096
3	11-1-2021	1-31-2022	0.9849	0.9849
4	2-1-2022	4-30-2022	0.9013	0.9013
5	5-1-2022	7-31-2022	0.9409	0.9409
6	8-1-2022	9-30-2022	0.6166	0.6166
		Highest	1.0096	1.0096

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7248	0.0176	1.5298	8.0000e-005		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	2.4994	2.4994	2.4100e-003	0.0000	2.5597
Energy	7.7800e-003	0.0665	0.0283	4.2000e-004		5.3700e-003	5.3700e-003		5.3700e-003	5.3700e-003	0.0000	193.7457	193.7457	0.0102	3.2200e-003	194.9612
Mobile	0.2003	0.8230	2.3661	7.9100e-003	0.7122	6.1900e-003	0.7184	0.1909	5.7700e-003	0.1967	0.0000	727.7724	727.7724	0.0327	0.0000	728.5901
Waste						0.0000	0.0000		0.0000	0.0000	13.8196	0.0000	13.8196	0.8167	0.0000	34.2375
Water						0.0000	0.0000		0.0000	0.0000	3.4116	12.1722	15.5838	0.0127	7.6100e-003	18.1673
Total	**0.9328**	**0.9071**	**3.9242**	**8.4100e-003**	**0.7122**	**0.0200**	**0.7322**	**0.1909**	**0.0196**	**0.2105**	**17.2313**	**936.1896**	**953.4208**	**0.8747**	**0.0108**	**978.5158**

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	0.7248	0.0176	1.5298	8.0000e-005		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	2.4994	2.4994	2.4100e-003	0.0000	2.5597
Energy	7.3800e-003	0.0631	0.0269	4.0000e-004		5.1000e-003	5.1000e-003		5.1000e-003	5.1000e-003	0.0000	73.0853	73.0853	1.4000e-003	1.3400e-003	73.5196
Mobile	0.2003	0.8230	2.3661	7.9100e-003	0.7122	6.1900e-003	0.7184	0.1909	5.7700e-003	0.1967	0.0000	727.7724	727.7724	0.0327	0.0000	728.5901
Waste						0.0000	0.0000		0.0000	0.0000	13.8196	0.0000	13.8196	0.8167	0.0000	34.2375
Water						0.0000	0.0000		0.0000	0.0000	2.7293	9.7377	12.4670	0.0101	6.0900e-003	14.5338
Total	**0.9324**	**0.9037**	**3.9227**	**8.3900e-003**	**0.7122**	**0.0198**	**0.7319**	**0.1909**	**0.0193**	**0.2102**	**16.5489**	**813.0947**	**829.6436**	**0.8634**	**7.4300e-003**	**853.4407**

	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	**0.04**	**0.37**	**0.04**	**0.24**	**0.00**	**1.35**	**0.04**	**0.00**	**1.38**	**0.13**	**3.96**	**13.15**	**12.98**	**1.30**	**31.39**	**12.78**

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	5/1/2021	5/4/2021	5	2	
2	Grading	Grading	5/5/2021	5/18/2021	5	10	
3	Building Construction	Building Construction	5/21/2021	10/6/2022	5	360	
4	Architectural Coating	Architectural Coating	6/4/2021	10/20/2022	5	360	
5	Paving	Paving	5/19/2022	5/20/2022	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5.8

Acres of Paving: 2.25

Residential Indoor: 299,700; Residential Outdoor: 99,900; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,000 (Architectural Coating – sqft)

OffRoad Equipment

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	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	149.00	32.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0405	0.0212	4.0000e-005		2.0400e-003	2.0400e-003		1.8800e-003	1.8800e-003	0.0000	3.3436	3.3436	1.0800e-003	0.0000	3.3706
Total	**3.8900e-003**	**0.0405**	**0.0212**	**4.0000e-005**	**0.0181**	**2.0400e-003**	**0.0201**	**9.9300e-003**	**1.8800e-003**	**0.0118**	**0.0000**	**3.3436**	**3.3436**	**1.0800e-003**	**0.0000**	**3.3706**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1131	0.1131	0.0000	0.0000	0.1132
Total	**6.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1131**	**0.1131**	**0.0000**	**0.0000**	**0.1132**

3.2 Site Preparation - 2021

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					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0405	0.0212	4.0000e-005		2.0400e-003	2.0400e-003		1.8800e-003	1.8800e-003	0.0000	3.3436	3.3436	1.0800e-003	0.0000	3.3706
Total	**3.8900e-003**	**0.0405**	**0.0212**	**4.0000e-005**	**0.0181**	**2.0400e-003**	**0.0201**	**9.9300e-003**	**1.8800e-003**	**0.0118**	**0.0000**	**3.3436**	**3.3436**	**1.0800e-003**	**0.0000**	**3.3706**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1131	0.1131	0.0000	0.0000	0.1132
Total	**6.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1131**	**0.1131**	**0.0000**	**0.0000**	**0.1132**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0332	0.0000	0.0332	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1237	0.0793	1.5000e-004		5.8000e-003	5.8000e-003		5.3400e-003	5.3400e-003	0.0000	13.0269	13.0269	4.2100e-003	0.0000	13.1322
Total	**0.0115**	**0.1237**	**0.0793**	**1.5000e-004**	**0.0332**	**5.8000e-003**	**0.0390**	**0.0169**	**5.3400e-003**	**0.0222**	**0.0000**	**13.0269**	**13.0269**	**4.2100e-003**	**0.0000**	**13.1322**

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	2.6000e-004	1.7000e-004	1.9000e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4714	0.4714	1.0000e-005	0.0000	0.4717
Total	**2.6000e-004**	**1.7000e-004**	**1.9000e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4714**	**0.4714**	**1.0000e-005**	**0.0000**	**0.4717**

3.3 Grading - 2021

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					0.0332	0.0000	0.0332	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1237	0.0793	1.5000e-004		5.8000e-003	5.8000e-003		5.3400e-003	5.3400e-003	0.0000	13.0268	13.0268	4.2100e-003	0.0000	13.1322
Total	**0.0115**	**0.1237**	**0.0793**	**1.5000e-004**	**0.0332**	**5.8000e-003**	**0.0390**	**0.0169**	**5.3400e-003**	**0.0222**	**0.0000**	**13.0268**	**13.0268**	**4.2100e-003**	**0.0000**	**13.1322**

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	2.6000e-004	1.7000e-004	1.9000e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4714	0.4714	1.0000e-005	0.0000	0.4717
Total	**2.6000e-004**	**1.7000e-004**	**1.9000e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4714**	**0.4714**	**1.0000e-005**	**0.0000**	**0.4717**

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	0.1530	1.4033	1.3343	2.1700e-003		0.0772	0.0772		0.0726	0.0726	0.0000	186.4680	186.4680	0.0450	0.0000	187.5927
Total	**0.1530**	**1.4033**	**1.3343**	**2.1700e-003**		**0.0772**	**0.0772**		**0.0726**	**0.0726**	**0.0000**	**186.4680**	**186.4680**	**0.0450**	**0.0000**	**187.5927**

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	8.1000e-003	0.2635	0.0704	6.3000e-004	0.0151	7.3000e-004	0.0158	4.3500e-003	7.0000e-004	5.0500e-003	0.0000	60.4445	60.4445	3.4600e-003	0.0000	60.5309
Worker	0.0415	0.0271	0.3036	8.3000e-004	0.0881	6.2000e-004	0.0887	0.0234	5.7000e-004	0.0240	0.0000	75.3949	75.3949	1.9800e-003	0.0000	75.4444
Total	**0.0496**	**0.2907**	**0.3740**	**1.4600e-003**	**0.1032**	**1.3500e-003**	**0.1045**	**0.0278**	**1.2700e-003**	**0.0291**	**0.0000**	**135.8394**	**135.8394**	**5.4400e-003**	**0.0000**	**135.9752**

3.4 Building Construction - 2021

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	0.1530	1.4033	1.3343	2.1700e-003		0.0772	0.0772		0.0726	0.0726	0.0000	186.4678	186.4678	0.0450	0.0000	187.5925
Total	**0.1530**	**1.4033**	**1.3343**	**2.1700e-003**		**0.0772**	**0.0772**		**0.0726**	**0.0726**	**0.0000**	**186.4678**	**186.4678**	**0.0450**	**0.0000**	**187.5925**

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	8.1000e-003	0.2635	0.0704	6.3000e-004	0.0151	7.3000e-004	0.0158	4.3500e-003	7.0000e-004	5.0500e-003	0.0000	60.4445	60.4445	3.4600e-003	0.0000	60.5309
Worker	0.0415	0.0271	0.3036	8.3000e-004	0.0881	6.2000e-004	0.0887	0.0234	5.7000e-004	0.0240	0.0000	75.3949	75.3949	1.9800e-003	0.0000	75.4444
Total	**0.0496**	**0.2907**	**0.3740**	**1.4600e-003**	**0.1032**	**1.3500e-003**	**0.1045**	**0.0278**	**1.2700e-003**	**0.0291**	**0.0000**	**135.8394**	**135.8394**	**5.4400e-003**	**0.0000**	**135.9752**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1698	1.5538	1.6282	2.6800e-003		0.0805	0.0805		0.0757	0.0757	0.0000	230.5666	230.5666	0.0552	0.0000	231.9476
Total	**0.1698**	**1.5538**	**1.6282**	**2.6800e-003**		**0.0805**	**0.0805**		**0.0757**	**0.0757**	**0.0000**	**230.5666**	**230.5666**	**0.0552**	**0.0000**	**231.9476**

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	9.2900e-003	0.3093	0.0803	7.7000e-004	0.0186	7.9000e-004	0.0194	5.3800e-003	7.6000e-004	6.1300e-003	0.0000	74.0541	74.0541	4.1500e-003	0.0000	74.1579
Worker	0.0480	0.0302	0.3448	9.9000e-004	0.1089	7.4000e-004	0.1096	0.0290	6.8000e-004	0.0296	0.0000	89.8521	89.8521	2.2000e-003	0.0000	89.9070
Total	**0.0573**	**0.3394**	**0.4251**	**1.7600e-003**	**0.1275**	**1.5300e-003**	**0.1290**	**0.0343**	**1.4400e-003**	**0.0358**	**0.0000**	**163.9062**	**163.9062**	**6.3500e-003**	**0.0000**	**164.0649**

3.4 Building Construction - 2022

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	0.1698	1.5538	1.6282	2.6800e-003		0.0805	0.0805		0.0757	0.0757	0.0000	230.5663	230.5663	0.0552	0.0000	231.9473
Total	**0.1698**	**1.5538**	**1.6282**	**2.6800e-003**		**0.0805**	**0.0805**		**0.0757**	**0.0757**	**0.0000**	**230.5663**	**230.5663**	**0.0552**	**0.0000**	**231.9473**

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	9.2900e-003	0.3093	0.0803	7.7000e-004	0.0186	7.9000e-004	0.0194	5.3800e-003	7.6000e-004	6.1300e-003	0.0000	74.0541	74.0541	4.1500e-003	0.0000	74.1579
Worker	0.0480	0.0302	0.3448	9.9000e-004	0.1089	7.4000e-004	0.1096	0.0290	6.8000e-004	0.0296	0.0000	89.8521	89.8521	2.2000e-003	0.0000	89.9070
Total	**0.0573**	**0.3394**	**0.4251**	**1.7600e-003**	**0.1275**	**1.5300e-003**	**0.1290**	**0.0343**	**1.4400e-003**	**0.0358**	**0.0000**	**163.9062**	**163.9062**	**6.3500e-003**	**0.0000**	**164.0649**

3.5 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	0.3943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0165	0.1153	0.1372	2.2000e-004		7.1000e-003	7.1000e-003		7.1000e-003	7.1000e-003	0.0000	19.2771	19.2771	1.3200e-003	0.0000	19.3101
Total	**0.4108**	**0.1153**	**0.1372**	**2.2000e-004**		**7.1000e-003**	**7.1000e-003**		**7.1000e-003**	**7.1000e-003**	**0.0000**	**19.2771**	**19.2771**	**1.3200e-003**	**0.0000**	**19.3101**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8400e-003	5.1300e-003	0.0573	1.6000e-004	0.0166	1.2000e-004	0.0168	4.4200e-003	1.1000e-004	4.5300e-003	0.0000	14.2373	14.2373	3.7000e-004	0.0000	14.2467
Total	**7.8400e-003**	**5.1300e-003**	**0.0573**	**1.6000e-004**	**0.0166**	**1.2000e-004**	**0.0168**	**4.4200e-003**	**1.1000e-004**	**4.5300e-003**	**0.0000**	**14.2373**	**14.2373**	**3.7000e-004**	**0.0000**	**14.2467**

3.5 Architectural Coating - 2021

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	0.3943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0165	0.1153	0.1372	2.2000e-004		7.1000e-003	7.1000e-003		7.1000e-003	7.1000e-003	0.0000	19.2770	19.2770	1.3200e-003	0.0000	19.3101
Total	**0.4108**	**0.1153**	**0.1372**	**2.2000e-004**		**7.1000e-003**	**7.1000e-003**		**7.1000e-003**	**7.1000e-003**	**0.0000**	**19.2770**	**19.2770**	**1.3200e-003**	**0.0000**	**19.3101**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8400e-003	5.1300e-003	0.0573	1.6000e-004	0.0166	1.2000e-004	0.0168	4.4200e-003	1.1000e-004	4.5300e-003	0.0000	14.2373	14.2373	3.7000e-004	0.0000	14.2467
Total	**7.8400e-003**	**5.1300e-003**	**0.0573**	**1.6000e-004**	**0.0166**	**1.2000e-004**	**0.0168**	**4.4200e-003**	**1.1000e-004**	**4.5300e-003**	**0.0000**	**14.2373**	**14.2373**	**3.7000e-004**	**0.0000**	**14.2467**

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5457					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.1472	0.1895	3.1000e-004		8.5400e-003	8.5400e-003		8.5400e-003	8.5400e-003	0.0000	26.6815	26.6815	1.7400e-003	0.0000	26.7249
Total	**0.5671**	**0.1472**	**0.1895**	**3.1000e-004**		**8.5400e-003**	**8.5400e-003**		**8.5400e-003**	**8.5400e-003**	**0.0000**	**26.6815**	**26.6815**	**1.7400e-003**	**0.0000**	**26.7249**

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	0.0102	6.3800e-003	0.0729	2.1000e-004	0.0230	1.6000e-004	0.0232	6.1200e-003	1.4000e-004	6.2700e-003	0.0000	19.0001	19.0001	4.6000e-004	0.0000	19.0117
Total	**0.0102**	**6.3800e-003**	**0.0729**	**2.1000e-004**	**0.0230**	**1.6000e-004**	**0.0232**	**6.1200e-003**	**1.4000e-004**	**6.2700e-003**	**0.0000**	**19.0001**	**19.0001**	**4.6000e-004**	**0.0000**	**19.0117**

3.5 Architectural Coating - 2022

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	0.5457					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.1472	0.1895	3.1000e-004		8.5400e-003	8.5400e-003		8.5400e-003	8.5400e-003	0.0000	26.6815	26.6815	1.7400e-003	0.0000	26.7249
Total	**0.5671**	**0.1472**	**0.1895**	**3.1000e-004**		**8.5400e-003**	**8.5400e-003**		**8.5400e-003**	**8.5400e-003**	**0.0000**	**26.6815**	**26.6815**	**1.7400e-003**	**0.0000**	**26.7249**

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	0.0102	6.3800e-003	0.0729	2.1000e-004	0.0230	1.6000e-004	0.0232	6.1200e-003	1.4000e-004	6.2700e-003	0.0000	19.0001	19.0001	4.6000e-004	0.0000	19.0117
Total	**0.0102**	**6.3800e-003**	**0.0729**	**2.1000e-004**	**0.0230**	**1.6000e-004**	**0.0232**	**6.1200e-003**	**1.4000e-004**	**6.2700e-003**	**0.0000**	**19.0001**	**19.0001**	**4.6000e-004**	**0.0000**	**19.0117**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1000e-003	0.0111	0.0146	2.0000e-005		5.7000e-004	5.7000e-004		5.2000e-004	5.2000e-004	0.0000	2.0028	2.0028	6.5000e-004	0.0000	2.0190
Paving	2.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0500e-003**	**0.0111**	**0.0146**	**2.0000e-005**		**5.7000e-004**	**5.7000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.0028**	**2.0028**	**6.5000e-004**	**0.0000**	**2.0190**

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	5.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0909	0.0909	0.0000	0.0000	0.0910
Total	**5.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0909**	**0.0909**	**0.0000**	**0.0000**	**0.0910**

3.6 Paving - 2022

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	1.1000e-003	0.0111	0.0146	2.0000e-005		5.7000e-004	5.7000e-004		5.2000e-004	5.2000e-004	0.0000	2.0028	2.0028	6.5000e-004	0.0000	2.0190
Paving	2.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0500e-003**	**0.0111**	**0.0146**	**2.0000e-005**		**5.7000e-004**	**5.7000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.0028**	**2.0028**	**6.5000e-004**	**0.0000**	**2.0190**

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	5.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0909	0.0909	0.0000	0.0000	0.0910
Total	**5.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0909**	**0.0909**	**0.0000**	**0.0000**	**0.0910**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.2003	0.8230	2.3661	7.9100e-003	0.7122	6.1900e-003	0.7184	0.1909	5.7700e-003	0.1967	0.0000	727.7724	727.7724	0.0327	0.0000	728.5901
Unmitigated	0.2003	0.8230	2.3661	7.9100e-003	0.7122	6.1900e-003	0.7184	0.1909	5.7700e-003	0.1967	0.0000	727.7724	727.7724	0.0327	0.0000	728.5901

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	744.44	744.44	744.44	1,910,314	1,910,314
Parking Lot	0.00	0.00	0.00		
Total	744.44	744.44	744.44	1,910,314	1,910,314

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 Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	116.7567	116.7567	8.7500e-003	1.8100e-003	117.5147
NaturalGas Mitigated	7.3800e-003	0.0631	0.0269	4.0000e-004		5.1000e-003	5.1000e-003		5.1000e-003	5.1000e-003	0.0000	73.0853	73.0853	1.4000e-003	1.3400e-003	73.5196
NaturalGas Unmitigated	7.7800e-003	0.0665	0.0283	4.2000e-004		5.3700e-003	5.3700e-003		5.3700e-003	5.3700e-003	0.0000	76.9890	76.9890	1.4800e-003	1.4100e-003	77.4465

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 Mid Rise	1.44272e+006	7.7800e-003	0.0665	0.0283	4.2000e-004		5.3700e-003	5.3700e-003		5.3700e-003	5.3700e-003	0.0000	76.9890	76.9890	1.4800e-003	1.4100e-003	77.4465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.7800e-003**	**0.0665**	**0.0283**	**4.2000e-004**		**5.3700e-003**	**5.3700e-003**		**5.3700e-003**	**5.3700e-003**	**0.0000**	**76.9890**	**76.9890**	**1.4800e-003**	**1.4100e-003**	**77.4465**

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 Mid Rise	1.36957e+006	7.3800e-003	0.0631	0.0269	4.0000e-004		5.1000e-003	5.1000e-003		5.1000e-003	5.1000e-003	0.0000	73.0853	73.0853	1.4000e-003	1.3400e-003	73.5196
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.3800e-003**	**0.0631**	**0.0269**	**4.0000e-004**		**5.1000e-003**	**5.1000e-003**		**5.1000e-003**	**5.1000e-003**	**0.0000**	**73.0853**	**73.0853**	**1.4000e-003**	**1.3400e-003**	**73.5196**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	629956	110.6112	8.2900e-003	1.7100e-003	111.3293
Parking Lot	35000	6.1455	4.6000e-004	1.0000e-004	6.1854
Total		**116.7567**	**8.7500e-003**	**1.8100e-003**	**117.5147**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.7248	0.0176	1.5298	8.0000e-005		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	2.4994	2.4994	2.4100e-003	0.0000	2.5597
Unmitigated	0.7248	0.0176	1.5298	8.0000e-005		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	2.4994	2.4994	2.4100e-003	0.0000	2.5597

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	0.0940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5845					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	0.0463	0.0176	1.5298	8.0000e-005		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	2.4994	2.4994	2.4100e-003	0.0000	2.5597
Total	**0.7248**	**0.0176**	**1.5298**	**8.0000e-005**		**8.4600e-003**	**8.4600e-003**		**8.4600e-003**	**8.4600e-003**	**0.0000**	**2.4994**	**2.4994**	**2.4100e-003**	**0.0000**	**2.5597**

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	0.0940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5845					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	0.0463	0.0176	1.5298	8.0000e-005		8.4600e-003	8.4600e-003		8.4600e-003	8.4600e-003	0.0000	2.4994	2.4994	2.4100e-003	0.0000	2.5597
Total	**0.7248**	**0.0176**	**1.5298**	**8.0000e-005**		**8.4600e-003**	**8.4600e-003**		**8.4600e-003**	**8.4600e-003**	**0.0000**	**2.4994**	**2.4994**	**2.4100e-003**	**0.0000**	**2.5597**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.4670	0.0101	6.0900e-003	14.5338
Unmitigated	15.5838	0.0127	7.6100e-003	18.1673

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	9.6428 / 6.07915	15.5838	0.0127	7.6100e-003	18.1673
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**15.5838**	**0.0127**	**7.6100e-003**	**18.1673**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	7.71424 / 4.86332	12.4670	0.0101	6.0900e-003	14.5338
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**12.4670**	**0.0101**	**6.0900e-003**	**14.5338**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.8196	0.8167	0.0000	34.2375
Unmitigated	13.8196	0.8167	0.0000	34.2375

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	68.08	13.8196	0.8167	0.0000	34.2375
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**13.8196**	**0.8167**	**0.0000**	**34.2375**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	68.08	13.8196	0.8167	0.0000	34.2375
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**13.8196**	**0.8167**	**0.0000**	**34.2375**

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

Laguna Main Street Apartments

Sacramento Metropolitan 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	2	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	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	3.79000E-002	2.62460E-001	3.26750E-001	5.30000E-004	1.56400E-002	1.56400E-002	0.00000E+000	4.59586E+001	4.59586E+001	3.06000E-003	0.00000E+000	4.60351E+001
Cranes	6.15600E-002	7.05870E-001	3.04420E-001	9.10000E-004	2.89900E-002	2.66700E-002	0.00000E+000	7.98407E+001	7.98407E+001	2.58200E-002	0.00000E+000	8.04863E+001
Excavators	1.15000E-003	1.07700E-002	1.63600E-002	3.00000E-005	5.20000E-004	4.80000E-004	0.00000E+000	2.26883E+000	2.26883E+000	7.30000E-004	0.00000E+000	2.28718E+000
Forklifts	6.51400E-002	5.99650E-001	6.26430E-001	8.30000E-004	4.10700E-002	3.77900E-002	0.00000E+000	7.25173E+001	7.25173E+001	2.34500E-002	0.00000E+000	7.31037E+001
Generator Sets	6.16000E-002	5.46240E-001	6.62380E-001	1.18000E-003	2.81200E-002	2.81200E-002	0.00000E+000	1.01737E+002	1.01737E+002	4.99000E-003	0.00000E+000	1.01862E+002
Graders	2.26000E-003	2.96200E-002	8.84000E-003	3.00000E-005	9.40000E-004	8.60000E-004	0.00000E+000	2.91063E+000	2.91063E+000	9.40000E-004	0.00000E+000	2.93416E+000
Pavers	4.10000E-004	4.20000E-003	5.77000E-003	1.00000E-005	2.00000E-004	1.80000E-004	0.00000E+000	8.26010E-001	8.26010E-001	2.70000E-004	0.00000E+000	8.32680E-001
Paving Equipment	3.60000E-004	3.48000E-003	5.09000E-003	1.00000E-005	1.70000E-004	1.60000E-004	0.00000E+000	7.15710E-001	7.15710E-001	2.30000E-004	0.00000E+000	7.21500E-001
Rollers	3.30000E-004	3.45000E-003	3.72000E-003	1.00000E-005	2.00000E-004	1.80000E-004	0.00000E+000	4.61040E-001	4.61040E-001	1.50000E-004	0.00000E+000	4.64770E-001
Rubber Tired Dozers	8.37000E-003	8.77700E-002	3.23000E-002	7.00000E-005	4.26000E-003	3.92000E-003	0.00000E+000	6.00449E+000	6.00449E+000	1.94000E-003	0.00000E+000	6.05304E+000
Tractors/Loaders/ Backhoes	8.61500E-002	8.74280E-001	1.10508E+000	1.53000E-003	4.92800E-002	4.53400E-002	0.00000E+000	1.34246E+002	1.34246E+002	4.34200E-002	0.00000E+000	1.35331E+002
Welders	5.19000E-002	2.67020E-001	3.07100E-001	4.60000E-004	1.23200E-002	1.23200E-002	0.00000E+000	3.38797E+001	3.38797E+001	4.21000E-003	0.00000E+000	3.39851E+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	3.79000E-002	2.62460E-001	3.26750E-001	5.30000E-004	1.56400E-002	1.56400E-002	0.00000E+000	4.59585E+001	4.59585E+001	3.06000E-003	0.00000E+000	4.60350E+001
Cranes	6.15600E-002	7.05870E-001	3.04420E-001	9.10000E-004	2.89900E-002	2.66700E-002	0.00000E+000	7.98406E+001	7.98406E+001	2.58200E-002	0.00000E+000	8.04862E+001
Excavators	1.15000E-003	1.07700E-002	1.63600E-002	3.00000E-005	5.20000E-004	4.80000E-004	0.00000E+000	2.26883E+000	2.26883E+000	7.30000E-004	0.00000E+000	2.28717E+000
Forklifts	6.51400E-002	5.99650E-001	6.26430E-001	8.30000E-004	4.10700E-002	3.77900E-002	0.00000E+000	7.25172E+001	7.25172E+001	2.34500E-002	0.00000E+000	7.31036E+001
Generator Sets	6.16000E-002	5.46240E-001	6.62380E-001	1.18000E-003	2.81200E-002	2.81200E-002	0.00000E+000	1.01737E+002	1.01737E+002	4.99000E-003	0.00000E+000	1.01862E+002
Graders	2.26000E-003	2.96200E-002	8.84000E-003	3.00000E-005	9.40000E-004	8.60000E-004	0.00000E+000	2.91063E+000	2.91063E+000	9.40000E-004	0.00000E+000	2.93416E+000
Pavers	4.10000E-004	4.20000E-003	5.77000E-003	1.00000E-005	2.00000E-004	1.80000E-004	0.00000E+000	8.26010E-001	8.26010E-001	2.70000E-004	0.00000E+000	8.32680E-001
Paving Equipment	3.60000E-004	3.48000E-003	5.09000E-003	1.00000E-005	1.70000E-004	1.60000E-004	0.00000E+000	7.15710E-001	7.15710E-001	2.30000E-004	0.00000E+000	7.21500E-001
Rollers	3.30000E-004	3.45000E-003	3.72000E-003	1.00000E-005	2.00000E-004	1.80000E-004	0.00000E+000	4.61040E-001	4.61040E-001	1.50000E-004	0.00000E+000	4.64770E-001
Rubber Tired Dozers	8.37000E-003	8.77700E-002	3.23000E-002	7.00000E-005	4.26000E-003	3.92000E-003	0.00000E+000	6.00448E+000	6.00448E+000	1.94000E-003	0.00000E+000	6.05303E+000
Tractors/Loaders/Backhoes	8.61500E-002	8.74280E-001	1.10508E+000	1.53000E-003	4.92800E-002	4.53400E-002	0.00000E+000	1.34246E+002	1.34246E+002	4.34200E-002	0.00000E+000	1.35331E+002
Welders	5.19000E-002	2.67020E-001	3.07100E-001	4.60000E-004	1.23200E-002	1.23200E-002	0.00000E+000	3.38797E+001	3.38797E+001	4.21000E-003	0.00000E+000	3.39850E+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	1.30552E-006	1.30552E-006	0.00000E+000	0.00000E+000	1.30335E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12724E-006	1.12724E-006	0.00000E+000	0.00000E+000	1.11820E-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	4.37220E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24108E-006	1.24108E-006	0.00000E+000	0.00000E+000	1.23113E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17806E-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	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.66542E-006	1.66542E-006	0.00000E+000	0.00000E+000	1.65206E-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	1.19184E-006	1.19184E-006	0.00000E+000	0.00000E+000	1.18228E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18065E-006	1.18065E-006	0.00000E+000	0.00000E+000	1.17699E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		

No	Clean Paved Road	% PM Reduction	0.00				

		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	0.04	0.01	0.04	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.23	0.06	0.23	0.06	0.00	0.00
Grading	Fugitive Dust	0.03	0.02	0.03	0.02	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.02	0.01	0.02	0.01	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	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	100.00	100.00	100.00	100.00	100.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	5.14	5.07	5.09	4.76	5.03	5.03	0.00	5.07	5.07	5.41	4.96	5.07
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.00	19.97	20.00
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:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.09	0.30		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
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	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
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				
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

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)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	7.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	0.00	100.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Laguna Main Street Apartments

Sacramento Metropolitan AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	250.00	Space	2.25	100,000.00	0
Apartments Mid Rise	148.00	Dwelling Unit	3.55	148,000.00	395

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	387.1	**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 adjusted based on SMUD's RPS reductions.

Land Use - Residential lot acreage adjusted based on total site acreage.

Construction Phase - Schedule adjusted based on applicant-provided information.

Grading - Grading adjusted per applicant-provided AQ questionnaire.

Vehicle Trips - Trip rate adjusted based on F&P Traffic Study.

Area Mitigation - Per applicant-provided information, hearths would not be installed.

Energy Mitigation - Title 24 exceedance applied to represent compliance with the 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CALGreen Code and MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	360.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	2.00
tblConstructionPhase	NumDays	10.00	2.00
tblGrading	AcresOfGrading	5.00	5.80
tblLandUse	LotAcreage	3.89	3.55
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.1
tblVehicleTrips	ST_TR	6.39	5.03
tblVehicleTrips	SU_TR	5.86	5.03
tblVehicleTrips	WD_TR	6.65	5.03

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.1582	40.5340	24.5683	0.0516	18.2032	2.0454	20.2486	9.9670	1.8818	11.8488	0.0000	5,043.5387	5,043.5387	1.1957	0.0000	5,061.4779
2022	12.0007	31.5627	38.8584	0.0749	1.6683	1.4761	3.1443	0.4469	1.3817	1.8285	0.0000	7,306.5154	7,306.5154	1.4243	0.0000	7,342.1216
Maximum	**12.0007**	**40.5340**	**38.8584**	**0.0749**	**18.2032**	**2.0454**	**20.2486**	**9.9670**	**1.8818**	**11.8488**	**0.0000**	**7,306.5154**	**7,306.5154**	**1.4243**	**0.0000**	**7,342.1216**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.1582	40.5340	24.5683	0.0516	18.2032	2.0454	20.2486	9.9670	1.8818	11.8488	0.0000	5,043.5387	5,043.5387	1.1957	0.0000	5,061.4779
2022	12.0007	31.5627	38.8584	0.0749	1.6683	1.4761	3.1443	0.4469	1.3817	1.8285	0.0000	7,306.5154	7,306.5154	1.4243	0.0000	7,342.1216
Maximum	**12.0007**	**40.5340**	**38.8584**	**0.0749**	**18.2032**	**2.0454**	**20.2486**	**9.9670**	**1.8818**	**11.8488**	**0.0000**	**7,306.5154**	**7,306.5154**	**1.4243**	**0.0000**	**7,342.1216**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726
Energy	0.0426	0.3643	0.1550	2.3300e-003		0.0295	0.0295		0.0295	0.0295		465.0182	465.0182	8.9100e-003	8.5300e-003	467.7815
Mobile	1.3948	4.3495	14.6675	0.0470	4.0509	0.0339	4.0848	1.0827	0.0316	1.1143		4,765.1160	4,765.1160	0.2035		4,770.2038
Total	**5.5254**	**4.8547**	**27.0609**	**0.0500**	**4.0509**	**0.1310**	**4.1819**	**1.0827**	**0.1287**	**1.2114**	**0.0000**	**5,252.1746**	**5,252.1746**	**0.2337**	**8.5300e-003**	**5,260.5579**

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	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726
Energy	0.0405	0.3458	0.1472	2.2100e-003		0.0280	0.0280		0.0280	0.0280		441.4394	441.4394	8.4600e-003	8.0900e-003	444.0627
Mobile	1.3948	4.3495	14.6675	0.0470	4.0509	0.0339	4.0848	1.0827	0.0316	1.1143		4,765.1160	4,765.1160	0.2035		4,770.2038
Total	**5.5232**	**4.8363**	**27.0531**	**0.0499**	**4.0509**	**0.1295**	**4.1804**	**1.0827**	**0.1272**	**1.2099**	**0.0000**	**5,228.5958**	**5,228.5958**	**0.2333**	**8.0900e-003**	**5,236.8391**

	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	**0.04**	**0.38**	**0.03**	**0.24**	**0.00**	**1.14**	**0.04**	**0.00**	**1.16**	**0.12**	**0.00**	**0.45**	**0.45**	**0.19**	**5.16**	**0.45**

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	5/1/2021	5/4/2021	5	2	
2	Grading	Grading	5/5/2021	5/18/2021	5	10	
3	Building Construction	Building Construction	5/21/2021	10/6/2022	5	360	
4	Architectural Coating	Architectural Coating	6/4/2021	10/20/2022	5	360	
5	Paving	Paving	5/19/2022	5/20/2022	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5.8

Acres of Paving: 2.25

Residential Indoor: 299,700; Residential Outdoor: 99,900; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,000 (Architectural Coating – sqft)

OffRoad Equipment

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	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	149.00	32.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0721	0.0369	0.5385	1.3900e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		137.9662	137.9662	3.6700e-003		138.0580
Total	**0.0721**	**0.0369**	**0.5385**	**1.3900e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**137.9662**	**137.9662**	**3.6700e-003**		**138.0580**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0721	0.0369	0.5385	1.3900e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		137.9662	137.9662	3.6700e-003		138.0580
Total	**0.0721**	**0.0369**	**0.5385**	**1.3900e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**137.9662**	**137.9662**	**3.6700e-003**		**138.0580**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6372	0.0000	6.6372	3.3766	0.0000	3.3766			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6372**	**1.1599**	**7.7971**	**3.3766**	**1.0671**	**4.4438**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0601	0.0308	0.4487	1.1500e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		114.9719	114.9719	3.0600e-003		115.0483
Total	**0.0601**	**0.0308**	**0.4487**	**1.1500e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**114.9719**	**114.9719**	**3.0600e-003**		**115.0483**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6372	0.0000	6.6372	3.3766	0.0000	3.3766			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6372**	**1.1599**	**7.7971**	**3.3766**	**1.0671**	**4.4438**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0601	0.0308	0.4487	1.1500e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		114.9719	114.9719	3.0600e-003		115.0483
Total	**0.0601**	**0.0308**	**0.4487**	**1.1500e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**114.9719**	**114.9719**	**3.0600e-003**		**115.0483**

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**

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	0.0989	3.2141	0.8207	7.9000e-003	0.1926	8.8200e-003	0.2014	0.0554	8.4300e-003	0.0638		836.7293	836.7293	0.0457		837.8726
Worker	0.5972	0.3057	4.4574	0.0115	1.1334	7.6500e-003	1.1411	0.3007	7.0500e-003	0.3077		1,142.0538	1,142.0538	0.0304		1,142.8135
Total	**0.6961**	**3.5198**	**5.2781**	**0.0194**	**1.3260**	**0.0165**	**1.3425**	**0.3561**	**0.0155**	**0.3716**		**1,978.7831**	**1,978.7831**	**0.0761**		**1,980.6861**

3.4 Building Construction - 2021

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**

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	0.0989	3.2141	0.8207	7.9000e-003	0.1926	8.8200e-003	0.2014	0.0554	8.4300e-003	0.0638		836.7293	836.7293	0.0457		837.8726
Worker	0.5972	0.3057	4.4574	0.0115	1.1334	7.6500e-003	1.1411	0.3007	7.0500e-003	0.3077		1,142.0538	1,142.0538	0.0304		1,142.8135
Total	**0.6961**	**3.5198**	**5.2781**	**0.0194**	**1.3260**	**0.0165**	**1.3425**	**0.3561**	**0.0155**	**0.3716**		**1,978.7831**	**1,978.7831**	**0.0761**		**1,980.6861**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0918	3.0557	0.7562	7.8200e-003	0.1925	7.7200e-003	0.2003	0.0554	7.3900e-003	0.0628		829.4304	829.4304	0.0444		830.5407
Worker	0.5574	0.2749	4.1049	0.0111	1.1334	7.4500e-003	1.1409	0.3007	6.8600e-003	0.3075		1,101.0969	1,101.0969	0.0273		1,101.7799
Total	**0.6492**	**3.3306**	**4.8611**	**0.0189**	**1.3260**	**0.0152**	**1.3411**	**0.3561**	**0.0143**	**0.3703**		**1,930.5274**	**1,930.5274**	**0.0717**		**1,932.3206**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0918	3.0557	0.7562	7.8200e-003	0.1925	7.7200e-003	0.2003	0.0554	7.3900e-003	0.0628		829.4304	829.4304	0.0444		830.5407
Worker	0.5574	0.2749	4.1049	0.0111	1.1334	7.4500e-003	1.1409	0.3007	6.8600e-003	0.3075		1,101.0969	1,101.0969	0.0273		1,101.7799
Total	**0.6492**	**3.3306**	**4.8611**	**0.0189**	**1.3260**	**0.0152**	**1.3411**	**0.3561**	**0.0143**	**0.3703**		**1,930.5274**	**1,930.5274**	**0.0717**		**1,932.3206**

3.5 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	5.2221					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	**5.4410**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	0.1202	0.0616	0.8975	2.3100e-003	0.2282	1.5400e-003	0.2298	0.0605	1.4200e-003	0.0620		229.9437	229.9437	6.1200e-003		230.0967
Total	**0.1202**	**0.0616**	**0.8975**	**2.3100e-003**	**0.2282**	**1.5400e-003**	**0.2298**	**0.0605**	**1.4200e-003**	**0.0620**		**229.9437**	**229.9437**	**6.1200e-003**		**230.0967**

3.5 Architectural Coating - 2021

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	5.2221					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	**5.4410**	**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**

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	0.1202	0.0616	0.8975	2.3100e-003	0.2282	1.5400e-003	0.2298	0.0605	1.4200e-003	0.0620		229.9437	229.9437	6.1200e-003		230.0967
Total	**0.1202**	**0.0616**	**0.8975**	**2.3100e-003**	**0.2282**	**1.5400e-003**	**0.2298**	**0.0605**	**1.4200e-003**	**0.0620**		**229.9437**	**229.9437**	**6.1200e-003**		**230.0967**

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.2221					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**5.4266**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1122	0.0554	0.8265	2.2300e-003	0.2282	1.5000e-003	0.2297	0.0605	1.3800e-003	0.0619		221.6974	221.6974	5.5000e-003		221.8349
Total	**0.1122**	**0.0554**	**0.8265**	**2.2300e-003**	**0.2282**	**1.5000e-003**	**0.2297**	**0.0605**	**1.3800e-003**	**0.0619**		**221.6974**	**221.6974**	**5.5000e-003**		**221.8349**

3.5 Architectural Coating - 2022

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	5.2221					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**5.4266**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1122	0.0554	0.8265	2.2300e-003	0.2282	1.5000e-003	0.2297	0.0605	1.3800e-003	0.0619		221.6974	221.6974	5.5000e-003		221.8349
Total	**0.1122**	**0.0554**	**0.8265**	**2.2300e-003**	**0.2282**	**1.5000e-003**	**0.2297**	**0.0605**	**1.3800e-003**	**0.0619**		**221.6974**	**221.6974**	**5.5000e-003**		**221.8349**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	2.9475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0503**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
Total	**0.0561**	**0.0277**	**0.4133**	**1.1100e-003**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**110.8487**	**110.8487**	**2.7500e-003**		**110.9174**

3.6 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	2.9475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0503**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
Total	**0.0561**	**0.0277**	**0.4133**	**1.1100e-003**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**110.8487**	**110.8487**	**2.7500e-003**		**110.9174**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	1.3948	4.3495	14.6675	0.0470	4.0509	0.0339	4.0848	1.0827	0.0316	1.1143		4,765.1160	4,765.1160	0.2035		4,770.2038
Unmitigated	1.3948	4.3495	14.6675	0.0470	4.0509	0.0339	4.0848	1.0827	0.0316	1.1143		4,765.1160	4,765.1160	0.2035		4,770.2038

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	744.44	744.44	744.44	1,910,314	1,910,314
Parking Lot	0.00	0.00	0.00		
Total	744.44	744.44	744.44	1,910,314	1,910,314

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 Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0405	0.3458	0.1472	2.2100e-003		0.0280	0.0280		0.0280	0.0280		441.4394	441.4394	8.4600e-003	8.0900e-003	444.0627
NaturalGas Unmitigated	0.0426	0.3643	0.1550	2.3300e-003		0.0295	0.0295		0.0295	0.0295		465.0182	465.0182	8.9100e-003	8.5300e-003	467.7815

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 Mid Rise	3952.65	0.0426	0.3643	0.1550	2.3300e-003		0.0295	0.0295		0.0295	0.0295		465.0182	465.0182	8.9100e-003	8.5300e-003	467.7815
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0426**	**0.3643**	**0.1550**	**2.3300e-003**		**0.0295**	**0.0295**		**0.0295**	**0.0295**		**465.0182**	**465.0182**	**8.9100e-003**	**8.5300e-003**	**467.7815**

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 Mid Rise	3.75224	0.0405	0.3458	0.1472	2.2100e-003		0.0280	0.0280		0.0280	0.0280		441.4394	441.4394	8.4600e-003	8.0900e-003	444.0627
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0405**	**0.3458**	**0.1472**	**2.2100e-003**		**0.0280**	**0.0280**		**0.0280**	**0.0280**		**441.4394**	**441.4394**	**8.4600e-003**	**8.0900e-003**	**444.0627**

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	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726
Unmitigated	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726

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	0.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2026					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	0.3703	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677		22.0405	22.0405	0.0213		22.5726
Total	**4.0880**	**0.1410**	**12.2384**	**6.5000e-004**		**0.0677**	**0.0677**		**0.0677**	**0.0677**	**0.0000**	**22.0405**	**22.0405**	**0.0213**	**0.0000**	**22.5726**

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	0.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2026					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	0.3703	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677		22.0405	22.0405	0.0213		22.5726
Total	**4.0880**	**0.1410**	**12.2384**	**6.5000e-004**		**0.0677**	**0.0677**		**0.0677**	**0.0677**	**0.0000**	**22.0405**	**22.0405**	**0.0213**	**0.0000**	**22.5726**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

Laguna Main Street Apartments

Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	250.00	Space	2.25	100,000.00	0
Apartments Mid Rise	148.00	Dwelling Unit	3.55	148,000.00	395

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	387.1	**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 adjusted based on SMUD's RPS reductions.

Land Use - Residential lot acreage adjusted based on total site acreage.

Construction Phase - Schedule adjusted based on applicant-provided information.

Grading - Grading adjusted per applicant-provided AQ questionnaire.

Vehicle Trips - Trip rate adjusted based on F&P Traffic Study.

Area Mitigation - Per applicant-provided information, hearths would not be installed.

Energy Mitigation - Title 24 exceedance applied to represent compliance with the 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CALGreen Code and MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	360.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	2.00
tblConstructionPhase	NumDays	10.00	2.00
tblGrading	AcresOfGrading	5.00	5.80
tblLandUse	LotAcreage	3.89	3.55
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.1
tblVehicleTrips	ST_TR	6.39	5.03
tblVehicleTrips	SU_TR	5.86	5.03
tblVehicleTrips	WD_TR	6.65	5.03

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.1074	40.5427	23.9120	0.0497	18.2032	2.0454	20.2486	9.9670	1.8818	11.8488	0.0000	4,854.9826	4,854.9826	1.1953	0.0000	4,872.9067
2022	11.9500	31.6915	38.1747	0.0730	1.6683	1.4766	3.1448	0.4469	1.3822	1.8290	0.0000	7,110.5845	7,110.5845	1.4236	0.0000	7,146.1746
Maximum	**11.9500**	**40.5427**	**38.1747**	**0.0730**	**18.2032**	**2.0454**	**20.2486**	**9.9670**	**1.8818**	**11.8488**	**0.0000**	**7,110.5845**	**7,110.5845**	**1.4236**	**0.0000**	**7,146.1746**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.1074	40.5427	23.9120	0.0497	18.2032	2.0454	20.2486	9.9670	1.8818	11.8488	0.0000	4,854.9826	4,854.9826	1.1953	0.0000	4,872.9067
2022	11.9500	31.6915	38.1747	0.0730	1.6683	1.4766	3.1448	0.4469	1.3822	1.8290	0.0000	7,110.5845	7,110.5845	1.4236	0.0000	7,146.1746
Maximum	**11.9500**	**40.5427**	**38.1747**	**0.0730**	**18.2032**	**2.0454**	**20.2486**	**9.9670**	**1.8818**	**11.8488**	**0.0000**	**7,110.5845**	**7,110.5845**	**1.4236**	**0.0000**	**7,146.1746**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726
Energy	0.0426	0.3643	0.1550	2.3300e-003		0.0295	0.0295		0.0295	0.0295		465.0182	465.0182	8.9100e-003	8.5300e-003	467.7815
Mobile	1.0372	4.6506	13.4361	0.0425	4.0509	0.0342	4.0851	1.0827	0.0319	1.1146		4,307.9089	4,307.9089	0.2015		4,312.9475
Total	**5.1678**	**5.1558**	**25.8296**	**0.0455**	**4.0509**	**0.1314**	**4.1822**	**1.0827**	**0.1291**	**1.2118**	**0.0000**	**4,794.9675**	**4,794.9675**	**0.2317**	**8.5300e-003**	**4,803.3016**

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	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726
Energy	0.0405	0.3458	0.1472	2.2100e-003		0.0280	0.0280		0.0280	0.0280		441.4394	441.4394	8.4600e-003	8.0900e-003	444.0627
Mobile	1.0372	4.6506	13.4361	0.0425	4.0509	0.0342	4.0851	1.0827	0.0319	1.1146		4,307.9089	4,307.9089	0.2015		4,312.9475
Total	**5.1657**	**5.1374**	**25.8217**	**0.0453**	**4.0509**	**0.1299**	**4.1808**	**1.0827**	**0.1276**	**1.2103**	**0.0000**	**4,771.3888**	**4,771.3888**	**0.2313**	**8.0900e-003**	**4,779.5828**

	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	**0.04**	**0.36**	**0.03**	**0.26**	**0.00**	**1.13**	**0.04**	**0.00**	**1.15**	**0.12**	**0.00**	**0.49**	**0.49**	**0.19**	**5.16**	**0.49**

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	5/1/2021	5/4/2021	5	2	
2	Grading	Grading	5/5/2021	5/18/2021	5	10	
3	Building Construction	Building Construction	5/21/2021	10/6/2022	5	360	
4	Architectural Coating	Architectural Coating	6/4/2021	10/20/2022	5	360	
5	Paving	Paving	5/19/2022	5/20/2022	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5.8

Acres of Paving: 2.25

Residential Indoor: 299,700; Residential Outdoor: 99,900; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,000 (Architectural Coating – sqft)

OffRoad Equipment

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	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	149.00	32.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0664	0.0456	0.4593	1.2200e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		121.1696	121.1696	3.2300e-003		121.2503
Total	**0.0664**	**0.0456**	**0.4593**	**1.2200e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**121.1696**	**121.1696**	**3.2300e-003**		**121.2503**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0664	0.0456	0.4593	1.2200e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		121.1696	121.1696	3.2300e-003		121.2503
Total	**0.0664**	**0.0456**	**0.4593**	**1.2200e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**121.1696**	**121.1696**	**3.2300e-003**		**121.2503**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6372	0.0000	6.6372	3.3766	0.0000	3.3766			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6372**	**1.1599**	**7.7971**	**3.3766**	**1.0671**	**4.4438**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0554	0.0380	0.3827	1.0100e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		100.9746	100.9746	2.6900e-003		101.0419
Total	**0.0554**	**0.0380**	**0.3827**	**1.0100e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**100.9746**	**100.9746**	**2.6900e-003**		**101.0419**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6372	0.0000	6.6372	3.3766	0.0000	3.3766			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6372**	**1.1599**	**7.7971**	**3.3766**	**1.0671**	**4.4438**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0554	0.0380	0.3827	1.0100e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		100.9746	100.9746	2.6900e-003		101.0419
Total	**0.0554**	**0.0380**	**0.3827**	**1.0100e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**100.9746**	**100.9746**	**2.6900e-003**		**101.0419**

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**

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	0.1048	3.2670	0.9519	7.7000e-003	0.1926	9.3600e-003	0.2019	0.0554	8.9600e-003	0.0644		815.2066	815.2066	0.0495		816.4447
Worker	0.5499	0.3776	3.8019	0.0101	1.1334	7.6500e-003	1.1411	0.3007	7.0500e-003	0.3077		1,003.0147	1,003.0147	0.0267		1,003.6830
Total	**0.6547**	**3.6445**	**4.7538**	**0.0178**	**1.3260**	**0.0170**	**1.3430**	**0.3561**	**0.0160**	**0.3721**		**1,818.2213**	**1,818.2213**	**0.0763**		**1,820.1277**

3.4 Building Construction - 2021

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**

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	0.1048	3.2670	0.9519	7.7000e-003	0.1926	9.3600e-003	0.2019	0.0554	8.9600e-003	0.0644		815.2066	815.2066	0.0495		816.4447
Worker	0.5499	0.3776	3.8019	0.0101	1.1334	7.6500e-003	1.1411	0.3007	7.0500e-003	0.3077		1,003.0147	1,003.0147	0.0267		1,003.6830
Total	**0.6547**	**3.6445**	**4.7538**	**0.0178**	**1.3260**	**0.0170**	**1.3430**	**0.3561**	**0.0160**	**0.3721**		**1,818.2213**	**1,818.2213**	**0.0763**		**1,820.1277**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0972	3.1005	0.8779	7.6200e-003	0.1925	8.2300e-003	0.2008	0.0554	7.8700e-003	0.0633		807.9632	807.9632	0.0481		809.1661
Worker	0.5143	0.3394	3.4864	9.7100e-003	1.1334	7.4500e-003	1.1409	0.3007	6.8600e-003	0.3075		967.1017	967.1017	0.0240		967.7011
Total	**0.6115**	**3.4399**	**4.3642**	**0.0173**	**1.3260**	**0.0157**	**1.3417**	**0.3561**	**0.0147**	**0.3708**		**1,775.0649**	**1,775.0649**	**0.0721**		**1,776.8672**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0972	3.1005	0.8779	7.6200e-003	0.1925	8.2300e-003	0.2008	0.0554	7.8700e-003	0.0633		807.9632	807.9632	0.0481		809.1661
Worker	0.5143	0.3394	3.4864	9.7100e-003	1.1334	7.4500e-003	1.1409	0.3007	6.8600e-003	0.3075		967.1017	967.1017	0.0240		967.7011
Total	**0.6115**	**3.4399**	**4.3642**	**0.0173**	**1.3260**	**0.0157**	**1.3417**	**0.3561**	**0.0147**	**0.3708**		**1,775.0649**	**1,775.0649**	**0.0721**		**1,776.8672**

3.5 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	5.2221					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	**5.4410**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	0.1107	0.0760	0.7655	2.0300e-003	0.2282	1.5400e-003	0.2298	0.0605	1.4200e-003	0.0620		201.9493	201.9493	5.3800e-003		202.0838
Total	**0.1107**	**0.0760**	**0.7655**	**2.0300e-003**	**0.2282**	**1.5400e-003**	**0.2298**	**0.0605**	**1.4200e-003**	**0.0620**		**201.9493**	**201.9493**	**5.3800e-003**		**202.0838**

3.5 Architectural Coating - 2021

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	5.2221					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	**5.4410**	**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**

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	0.1107	0.0760	0.7655	2.0300e-003	0.2282	1.5400e-003	0.2298	0.0605	1.4200e-003	0.0620		201.9493	201.9493	5.3800e-003		202.0838
Total	**0.1107**	**0.0760**	**0.7655**	**2.0300e-003**	**0.2282**	**1.5400e-003**	**0.2298**	**0.0605**	**1.4200e-003**	**0.0620**		**201.9493**	**201.9493**	**5.3800e-003**		**202.0838**

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.2221					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**5.4266**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1036	0.0683	0.7020	1.9500e-003	0.2282	1.5000e-003	0.2297	0.0605	1.3800e-003	0.0619		194.7185	194.7185	4.8300e-003		194.8391
Total	**0.1036**	**0.0683**	**0.7020**	**1.9500e-003**	**0.2282**	**1.5000e-003**	**0.2297**	**0.0605**	**1.3800e-003**	**0.0619**		**194.7185**	**194.7185**	**4.8300e-003**		**194.8391**

3.5 Architectural Coating - 2022

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	5.2221					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**5.4266**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1036	0.0683	0.7020	1.9500e-003	0.2282	1.5000e-003	0.2297	0.0605	1.3800e-003	0.0619		194.7185	194.7185	4.8300e-003		194.8391
Total	**0.1036**	**0.0683**	**0.7020**	**1.9500e-003**	**0.2282**	**1.5000e-003**	**0.2297**	**0.0605**	**1.3800e-003**	**0.0619**		**194.7185**	**194.7185**	**4.8300e-003**		**194.8391**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	2.9475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0503**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
Total	**0.0518**	**0.0342**	**0.3510**	**9.8000e-004**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**97.3592**	**97.3592**	**2.4100e-003**		**97.4196**

3.6 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	2.9475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0503**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
Total	**0.0518**	**0.0342**	**0.3510**	**9.8000e-004**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**97.3592**	**97.3592**	**2.4100e-003**		**97.4196**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	1.0372	4.6506	13.4361	0.0425	4.0509	0.0342	4.0851	1.0827	0.0319	1.1146		4,307.9089	4,307.9089	0.2015		4,312.9475
Unmitigated	1.0372	4.6506	13.4361	0.0425	4.0509	0.0342	4.0851	1.0827	0.0319	1.1146		4,307.9089	4,307.9089	0.2015		4,312.9475

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	744.44	744.44	744.44	1,910,314	1,910,314
Parking Lot	0.00	0.00	0.00		
Total	744.44	744.44	744.44	1,910,314	1,910,314

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 Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0405	0.3458	0.1472	2.2100e-003		0.0280	0.0280		0.0280	0.0280		441.4394	441.4394	8.4600e-003	8.0900e-003	444.0627
NaturalGas Unmitigated	0.0426	0.3643	0.1550	2.3300e-003		0.0295	0.0295		0.0295	0.0295		465.0182	465.0182	8.9100e-003	8.5300e-003	467.7815

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 Mid Rise	3952.65	0.0426	0.3643	0.1550	2.3300e-003		0.0295	0.0295		0.0295	0.0295		465.0182	465.0182	8.9100e-003	8.5300e-003	467.7815
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0426**	**0.3643**	**0.1550**	**2.3300e-003**		**0.0295**	**0.0295**		**0.0295**	**0.0295**		**465.0182**	**465.0182**	**8.9100e-003**	**8.5300e-003**	**467.7815**

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 Mid Rise	3.75224	0.0405	0.3458	0.1472	2.2100e-003		0.0280	0.0280		0.0280	0.0280		441.4394	441.4394	8.4600e-003	8.0900e-003	444.0627
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0405**	**0.3458**	**0.1472**	**2.2100e-003**		**0.0280**	**0.0280**		**0.0280**	**0.0280**		**441.4394**	**441.4394**	**8.4600e-003**	**8.0900e-003**	**444.0627**

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	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726
Unmitigated	4.0880	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.0405	22.0405	0.0213	0.0000	22.5726

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	0.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2026					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	0.3703	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677		22.0405	22.0405	0.0213		22.5726
Total	**4.0880**	**0.1410**	**12.2384**	**6.5000e-004**		**0.0677**	**0.0677**		**0.0677**	**0.0677**	**0.0000**	**22.0405**	**22.0405**	**0.0213**	**0.0000**	**22.5726**

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	0.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2026					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	0.3703	0.1410	12.2384	6.5000e-004		0.0677	0.0677		0.0677	0.0677		22.0405	22.0405	0.0213		22.5726
Total	**4.0880**	**0.1410**	**12.2384**	**6.5000e-004**		**0.0677**	**0.0677**		**0.0677**	**0.0677**	**0.0000**	**22.0405**	**22.0405**	**0.0213**	**0.0000**	**22.5726**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

APPENDIX B

SMAQMD MINOR PROJECT HEALTH EFFECTS TOOL

Minor Project Health Effects Tool

Latitude	38.425959	**<-- Step 1: Input latitude (Please chose a value between 38.0 and 39.7)**
Longitude	-121.47001	**<-- Step 2: Input longitude (Please chose a value between -122.5 and -120.0)**

PM2.5 Health Endpoint	Age Range[1]	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year)[2,5] (Mean)	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2] (Mean)	Percent of Background Health Incidences Across the 5-Air-District Region[3]	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
Respiratory					
Emergency Room Visits, Asthma	0 - 99	0.97	0.87	0.0047%	18419
Hospital Admissions, Asthma	0 - 64	0.063	0.057	0.0031%	1846
Hospital Admissions, All Respiratory	65 - 99	0.32	0.28	0.0014%	19644
Cardiovascular					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.17	0.15	0.00064%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.000083	0.000072	0.0019%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0070	0.0065	0.0021%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.018	0.017	0.0023%	741
Acute Myocardial Infarction, Nonfatal	55 - 64	0.030	0.027	0.0022%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.11	0.10	0.0020%	5052
Mortality					
Mortality, All Cause	30 - 99	2.1	1.9	0.0042%	44766

Ozone Health Endpoint	Age Range[1]	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year)[2,5] (Mean)	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2] (Mean)	Percent of Background Health Incidences Across the 5-Air-District Region[3]	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
Respiratory					
Hospital Admissions, All Respiratory	65 - 99	0.080	0.065	0.00033%	19644
Emergency Room Visits, Asthma	0 - 17	0.44	0.38	0.0065%	5859
Emergency Room Visits, Asthma	18 - 99	0.68	0.59	0.0047%	12560
Mortality					
Mortality, Non-Accidental	0 - 99	0.049	0.042	0.00014%	30386

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region.

3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.

5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.*

APPENDIX C

GEOTECHNICAL ENGINEERING STUDY UPDATE

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KF Development
9105 Laguna Main Street #130
Elk Grove, California 95758

Project No. E17420.001
2 June 2020

Attention: Mr. Michael Green

Subject: **LAGUNA APARTMENTS**
Laguna Main Street & Vaux Avenue, Elk Grove, California
GEOTECHNICAL ENGINEERING STUDY UPDATE

References:
1. Geotechnical Engineering Study for Laguna West Phases II and III, prepared by Youngdahl Consulting Group, Inc., dated 22 December 2017 (Project No. E17420.000).
2. Architectural Plans for Laguna Main Apartments, prepared by LPAS, dated 7 May 2020 (Project No. 1282-0002).
3. Executed Contract for Laguna Apartments, prepared by Youngdahl Consulting Group, Inc., dated 22 May 2020.

Dear Mr. Green:

In accordance with your authorization, Youngdahl Consulting Group, Inc. has performed a review of the referenced Geotechnical Engineering Study (Reference 1) for the purpose of updating the report to the 2019 California Building Code (CBC) provisions. The scope of this study included a site reconnaissance, review of the previous geotechnical report, and preparation of this report summarizing our geotechnically related findings, conclusions, and recommendations regarding the suitability of the subject property for development.

Project Understanding
The proposed construction is expected to consist of up to three-story apartment buildings with associated drive aisles, parking lots, utilities, landscaping, and pools. Due to the relatively flat nature of the site, we anticipate that grading operations will likely consist of cuts and fills on the order of 5 feet or less.

Surface Observations
The project site is located south of Laguna Boulevard at the intersection of Laguna Main Street and Vaux Avenue in Elk Grove, California. The project area consists of undeveloped parcels south of Vaux Avenue and bisected by Laguna Main Street with Peets Street to the east, Nolan Street to the west, and Renwick Avenue to the south. The project area encompasses approximately 6 acres.

Vegetation on the site consists of seasonal grasses that appear to have been tilled approximately 12 inches deep. The perimeter of the site is lined with trees and short bushes that abut the back of the existing concrete sidewalks. Topography at the site is generally relatively flat. However, the ground surfaces of the lots are elevated approximately 2 feet above the existing street grade and portions of the raised area descend at an approximately 2H:1V slope towards the existing perimeter sidewalks and streets.

Based on our recent site reconnaissance, the site appears to be relatively unchanged and in a similar condition to that observed during the Reference 1 study.

Review Comments

Based on our review, the geotechnical aspects of the Reference 1 study conform to the 2019 CBC with the exception of code based seismic criteria resulting from the updates of the CBC from the 2016 to 2019 edition. The following section summarizes the applicable changes.

Code Based Seismic Criteria

Based on the 2019 California Building Code, Chapter 16, and our site investigation findings, the following seismic parameters are recommended from a geotechnical perspective for structural design. The final choice of design parameters, however, remains the purview of the project structural engineer.

The following calculations have been performed based on ASCE 7-16 Section 11.4.8 using exception No. 2. Section 1613.1 of the CBC indicates that either Section 1613 or ASCE 7-16 may be used for determination of seismic design categories. The value of Fv was calculated using CBC Table 1613.2.3(2) since an evaluation of the site-specific ground motion response was not performed in accordance with ASCE 7-16 Chapter 21 due to the applied exception. The structural engineer should review the conditions of the exception.

Seismic Design Parameters

Reference		Seismic Parameter	Recommended Value
ASCE 7-16	Table 20.3-1	Site Class	D
	Figure 22-7	Maximum Considered Earthquake Geometric Mean (MCE_C) PGA	0.252g
	Table 11.8-1	Site Coefficient F_{PGA}	1.348
	Equation 11.8-1	$PGA_M = F_{PGA}$ PGA	0.340g
2019 CBC	Figure 1613A.3.1(1)	Short-Period MCE at 0.2s, S_S	0.603g
	Figure 1613A.3.1(2)	1.0s Period MCE, S_1	0.260g
	Table 1613A.3.3(1)	Site Coefficient, F_a	1.318
	Table 1613A.3.3(2)	Site Coefficient, F_v	2.080
	Equation 16A-37	Adjusted MCE Spectral Response Parameters, $S_{MS} = F_a S_s$	0.794g
	Equation 16A-38	Adjusted MCE Spectral Response Parameters, $S_{M1} = F_v S_1$	0.541g
	Equation 16A-39	Design Spectral Acceleration Parameters, $S_{DS} = ⅔ S_{MS}$	0.530g
	Equation 16A-40	Design Spectral Acceleration Parameters, $S_{D1} = ⅔ S_{M1}$	0.361g
	Table 1613A.3.5(1)	Seismic Design Category (Short Period), Occupancy I to IV	D
	Table 1613A.3.5(2)	Seismic Design Category (1-Sec Period), Occupancy I to IV	D

*Based on the online calculator available at http://earthquake.usgs.gov/designmaps/us/application.php

Closure

This report has been prepared for the exclusive use of KF Development and their consultants, for specific application to this project, in accordance with generally accepted geotechnical

engineering practice. Should you have any questions or require additional information, please contact our office at your convenience.

Very truly yours,
Youngdahl Consulting Group, Inc.

Devin S. Fielding
Staff Engineer

Reviewed by:

Matthew J. Gross, P.E., G.E.
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. GROSS
GE 3088
GEOTECHNICAL
STATE OF CALIFORNIA

Distribution: PDF to Client

Attachments: Reference 1

GEOTECHNICAL ENGINEERING STUDY UPDATE
FOR
LAGUNA WEST PHASES II AND III

Laguna Main Street and Vaux Avenue
Elk Grove, California

Project No. PE 17420.000
December 2017

YOUNGDAHL
CONSULTING GROUP, INC.

Building Innovative Solutions

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30 YEARS

KF Development
9105 Laguna Main Street, #130
Elk Grove, California 95758

Project No. E17420.000
22 December 2017

Attention: Mr. Lewis Kolb

Subject: **LAGUNA WEST PHASES II AND III**
Laguna Main Street and Vaux Avenue, Elk Grove, Sacramento County, California
GEOTECHNICAL ENGINEERING STUDY

References:
1. Geotechnical Engineering Study for The Toscana Apartments Prepared by Youngdahl Consulting Group, Inc., dated 21 December 2017.
2. Proposal No PE17-449, prepared by Youngdahl Consulting Group, Inc., executed 3 November 2017

Dear Mr. Kolb,

In accordance with your authorization, Youngdahl Consulting Group, Inc. has performed a Geotechnical Engineering Study for the project site located south of the intersection of Laguna Main Street and Vaux Avenue in Elk Grove, California. The purpose of this study was to perform a subsurface exploration and evaluate the surface and subsurface soil conditions at the site and provide geotechnical information and design criteria for the proposed project. Our scope was limited to a subsurface investigation, laboratory testing and preparation of this report per the Reference No. 2 proposal.

Based upon our site reconnaissance and subsurface exploration program, it is our opinion that the primary geotechnical issues to be addressed consist of overexcavation of loose surface soils and recompaction as engineered fills, excavations into cemented soils, and drainage related to the shallow cemented soils and other geologic features, and potentially expansive clay mitigation. Due to the non-uniform nature of soils, other geotechnical issues may become more apparent during grading operations which are not listed above. The descriptions, findings, conclusions, and recommendations provided in this report are formulated as a whole; specific conclusions or recommendations should not be derived or used out of context. Please review the limitations and uniformity of conditions section of this report.

This report has been prepared for the exclusive use of KF Development and their consultants, for specific application to this project, in accordance with generally accepted geotechnical engineering practice. Should you have any questions or require additional information, please contact our office at your convenience.

Very truly yours,
Youngdahl Consulting Group, Inc.

Matt Gessner
Staff Engineer

Reviewed By:

Matthew J. Gross, P.E., G.E.
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. GROSS
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GEOTECHNICAL
STATE OF CALIFORNIA

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GEOTECHNICAL ENGINEERING STUDY
FOR
LAGUNA WEST PHASES II AND III

1.0 INTRODUCTION

This report presents the results of our Geotechnical Engineering Study performed for the proposed residential development planned to be constructed along Laguna Main Street and Vaux Avenue in Elk Grove, California. An annotated vicinity map is provided on Figure A-1 to identify the approximate project location.

Purpose and Scope

The purpose of this study was to explore and evaluate the surface and subsurface conditions at the site, to provide geotechnical information and design criteria, and to develop geotechnical recommendations for the proposed project. The scope of this study includes the following:

- A review of geotechnical and geologic data available to us at the time of our study;
- A field study consisting of a site reconnaissance, followed by an exploratory boring program to observe and characterize the subsurface conditions;
- A laboratory testing program performed on representative samples collected during our field study;
- Engineering analysis of the data and information obtained from our field study, laboratory testing, and literature review;
- Development of geotechnical recommendations regarding earthwork construction including, site preparation and grading, excavation characteristics, soil moisture conditions, compaction equipment, engineered fill criteria, slope configuration and grading, underground improvements, and drainage;
- Development of geotechnical design criteria for seismic conditions, shallow foundations, slabs on grade, and pavements;
- Preparation of this report summarizing our findings, conclusions, and recommendations regarding the above described information.

Project Understanding

We understand that the project site is located on the four unimproved parcels south of Vaux Avenue, and bisected by Laguna Main Street in Elk Grove, California. Preliminary designs for the proposed development were not available at the time this report was prepared; however, we anticipate the proposed development will consist of one and two story residences of wood frame construction with conventional shallow foundations and concrete slab on grade floors.

Background

A limited aerial imagery and photo review was performed dating back to 1952. The imagery indicates the project site historically had been utilized for agricultural purposes until circa 1993, at which time Laguna West Lakeside development and surrounding area appeared to have been rough graded. These features were observed across the entire development including the subject parcels and all the surrounding parcels. Additionally, construction of the lakes surrounding Bartholomew Park took place around this time. Imagery indicates that by 2002 the subject site had received its final improvements and that it appears the only modifications to the site consist of vegetation control operations to date.

If studies or plans pertaining to the site exist and are not cited as a reference in this report, we should be afforded the opportunity to review and modify our conclusions and recommendations as necessary.

2.0 FINDINGS

The following section describes our findings regarding the site conditions that we observed during our site reconnaissance and subsequent subsurface exploration. In addition, this section also provides the results of our laboratory testing, geologic review, and engineering assessment/analysis related to the project site.

Surface Observations

The project site is generally located south of Laguna Boulevard at the intersection of Laguna Main Street and Vaux Avenue in Elk Grove, California. The project area consists of 4 undeveloped parcels south of Vaux Avenue and bisected by Laguna Main Street. The project area encompasses approximately 6 acres.

The terrain at the site is heavily vegetated with mowed dry seasonal grasses and the perimeter is lined with several sycamore trees and short bushes that abut the back of the existing concrete sidewalks. The surface material appears to have been tilled approximately 12 inches deep.

Topography at the site generally flat. The surface of both lots on the east and west sides of Laguna Main Street are elevated approximately 2 feet above the existing street grade and the edges of both lots descend at an approximately 2H:1V slope descending to the existing perimeter sidewalks and streets surrounding each lot.

No structures were observed at the site at the time of our site reconnaissance, however; evidence of existing utilities was apparent in all four corners of both lots at the project site.

Subsurface Conditions

Our field study included a site reconnaissance by a representative of our firm followed by a subsurface exploration program conducted on 21 November 2017. The exploration program included the advancement of 5 exploratory borings under the direction of our representative at the approximate locations shown on Figure A-2, Appendix A. A description of the field exploration program is provided in Appendix A.

Subsurface soil conditions generally consisted of sands, silts and clays. The upper soil layers were generally observed to consist of SAND in a loose to very dense and slightly moist to moist condition up to 10 feet below the ground surface. Within borings B-2, B-4 and B-5 occasional pockets of CLAY and sandy CLAY were encountered in a stiff to hard condition to depths ranging from 3 ½ to 5 ½ feet below the ground surface. Underlying the surface soils, variably cemented interbedded SANDS and SILTSwere observed to the maximum depth explored of 20 feet below the ground surface with the exception of a 1 foot thick sandy CLAY lens encountered in boring B-1 at 13 feet below ground surface.

A more detailed description of the subsurface conditions encountered during our subsurface exploration is presented graphically on the “Exploratory Boring Logs", Figures A-3 through A-8, Appendix A. These logs show a graphic interpretation of the subsurface profile, and the location and depths at which samples were collected.

Groundwater Conditions
Groundwater conditions were not observed within our exploratory borings, which ranged in depths from 15 to 20 feet below the ground surface; however, groundwater was encountered at depths of 19 and 26 feet below ground surface in two borings for a project site located approximately ¼ mile south of the subject project.

Additionally, a review of well data from the California Department of Water Resources (http://water.ca.gov), the permanent groundwater table in the vicinity of the project site ranges between 20 to 30 feet below the ground surface.

Geologic Conditions
The geologic portion of this report included a review of geologic data pertinent to the site and an interpretation of our observations of the surface exposures and our observations in our exploratory borings excavated during the field study.

The site is located within the Sacramento Valley portion of the Great Valley Geologic Formation. According to the General Geologic Map of Sacramento County (OFR 99-09) this portion of the valley and the project area are underlain by Pleistocene alluvial deposits of Lower Unit Riverbank Formation.

Seismicity
According to the Fault Activity Map of California and Adjacent Areas (Jennings, 2010) and the Peak Acceleration from Maximum Credible Earthquakes in California (CDMG, 2007), no active faults or Earthquake Fault Zones (Special Studies Zones) are located on the project site. Additionally, no evidence of recent or active faulting was observed during our field study. The nearest mapped potentially active and active faults pertinent to the site are summarized in the following table.

Table 1: Local Active and Potentially Active Faults

Activity	Fault Name	Distance, Direction
Active	Dunnigan Hills	48 km NW
Active	Green Valley Fault Zone	65 km E
Potentially Active	Vaca Fault	46 km W
Potentially Active	Bear Mountains Fault Zone - West	46 km E
Potentially Active	Bear Mountains Fault Zone - East	47 km E
Potentially Active	Midland Fault	29 km SW
Potentially Active	Melones - West	51 km E
Potentially Active	Melones - East	55 km E

Based on our literature review of shear-wave velocity characteristics of geologic units in California (Wills and Silva; August 1998: Earthquake Spectra, Volume 14, No. 3) and subsurface interpretations, we recommend that the project site be classified as Site Class D in accordance with Section 1613.3.2 of the 2016 CBC and Table 20.3-1 of ASCE 7-10.

Earthquake Induced Liquefaction, Surface Rupture Potential, and Settlement
Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading.

Due to the relatively low seismicity of the area and the relatively shallow depth to cemented soils, the potential for seismically induced damage due to liquefaction, surface ruptures, and settlement is considered negligible. Additionally, the maximum depth explored in our borings for this project is 20 feet below ground surface; however, we have performed a liquefaction analysis using a 50 foot boring for a separate project located within in the vicinity of the current subject project. Based on our knowledge of the area and the conditions observed the potential for seismically induced damage due to liquefaction within the project vicinity is negligible.

Static and Earthquake Induced Slope Instability

The site at the time of our visit was observed to be generally flat, with no discernable slopes present, and is not proposed to have unsupported slopes following development of the site. For the above-mentioned reasons, the potential for seismically induced slope instability for the existing slopes is considered nil. Temporary excavations are addressed in Section 4 of this report.

Laboratory Testing

Laboratory testing of the collected samples was directed towards determining the physical and engineering properties of the soil underlying the site. A description of the tests performed for this project and the associated test results are presented in Appendix B. In summary, the following tests were performed for the preparation of this report:

Table 2: Laboratory Tests

Laboratory Test	Test Standard	Summary of Results	
Direct Shear	ASTM D3080	B 5 0-3 ft:	Φ = 33.1°, c = 193 psf (90% RC)
Maximum Dry Density	ASTM D1557	B 5 @ 0-3 ft:	DD = 119.5 pcf, MC = 9.3 %
R-Value	Caltrans 301	B 5 @ 0-3 ft:	25
Expansion Index	ASTM D4829	Composite Sample (B2 @ 2.5 ft & 3 ft, B4 @ 2.5 ft & 3 ft):	EI=85
Corrosivity Suite	CA DOT Tests 417, 422 and 643	See Soil Corrosivity Section	

Soil Expansion Potential

Occasional pockets of plastic materials (clay soils) were encountered in the surficial materials and the majority of the plastic materials encountered at the site lie below thick weakly to moderately cemented layers of medium dense to dense SAND or stiff to very stiff SILT. Additionally, the materials encountered in our explorations were generally non-plastic (sand and non-plastic silt). The non-plastic materials are generally considered to be non-expansive. Occasional lenses of moderately expansive soils were observed at depths that we anticipate will support foundations, or be near. Depending on the proposed grading plans and cuts or fills in the areas where clay was encountered, recommendations can be made based on our observations at the time of construction for application of pre-saturation of clayey materials encountered at time of foundation placement.

Soil Corrosivity

A corrosivity testing suite consisting of soil pH, resistivity, sulfate, and chloride content tests were performed on selected soil samples collected during our site exploration. We are not corrosion specialists and recommend that the results be evaluated by a qualified corrosion expert. The

laboratory test results (provided by Sunland Analytical, Inc.) are provided in Appendix B and are summarized in Table 3, below.

Table 3: Corrosivity Summary

Location	Depth (ft)	Soil pH	Minimum Resistivity ohm-cm (x1000)	Chloride (ppm)	Sulfate (ppm)	Caltrans Environment	ACI Environment
B5	0-3	7.60	2.39	27.3	12.4	Non Corrosive	S0 (Not a Concern)

According to Caltrans Corrosion Guidelines Version 2.1, January 2015, the test results appear to indicate a non-corrosive environment within the vicinity of B-5's sample location. Additionally, according to the 2016 California Building Code Section 1904.1 and ACI 318-14 Table 19.3.1.1, the test results indicate the onsite soils have a negligible potential for sulfide attack of concrete.

A certified corrosion engineer should be consulted to review the above tests and site conditions in order to develop specific mitigation recommendations if metallic pipes or structural elements are designed to be in contact with or buried in soil.

3.0 DISCUSSION AND CONCLUSIONS

General

Based upon the results of our field explorations, findings, and analysis described above, it is our opinion that construction of the proposed improvements is feasible from a geotechnical standpoint, provided the recommendations contained in this report are incorporated into the design plans and implemented during construction. The native soils once overexcavated and recompacted as recommended below may be considered "engineered" and suitable for support of the planned improvements.

Approach to Development

The site appears to have received tilling activities in the past. The tilling procedures have left the upper 12 inches of site soils in a loose condition, which is unsuitable for the proposed improvements. We recommend overexcavating the upper 12 inches then scarifying the overexcavation bottom to a depth of 12 inches, and recompacting as engineered fill.

Our borings encountered a layer of moderately expansive clay ranging in depth from 2 to 3 feet below the ground surface, in layers ranging in thickness from 1 to 3½ feet. Due to the potential damages to foundations that can be incurred from these clays swelling and shrinking with variations in moisture, we recommend where encountered, these soils be overexcavated and adequately blended with non-expansive onsite soils prior to use as engineered fill. Additionally, where clay soils are encountered we recommend subgrade soils receive a 12 inch pre-saturation prior to foundation and slab construction.

4.0 SITE GRADING AND EARTHWORK IMPROVEMENTS

Site Preparation

Preparation of the project site should involve site drainage controls, dust control, clearing and stripping, overexcavation and recompaction of existing loose native soils, and exposed grade

compaction considerations. The following paragraphs state our geotechnical comments and recommendations concerning site preparation.

Site Drainage Controls: We recommend that initial site preparation involve intercepting and diverting any potential sources of surface or near-surface water within the construction zones. Because the selection of an appropriate drainage system will depend on the water quantity, season, weather conditions, construction sequence, and methods used by the contractor, final decisions regarding drainage systems are best made in the field at the time of construction. All drainage and/or water diversion performed for the site should be in accordance with the Clean Water Act and applicable Storm Water Pollution Prevention Plan.

Dust Control: Dust control provisions should be provided for as required by the local jurisdiction's grading ordinance (i.e. water truck or other adequate water supply during grading).

Clearing and Stripping: Clearing and stripping operations should include the removal of all organic laden materials including trees, bushes, root balls, root systems, and any soft or loose soil generated by the removal operations. Surface grass stripping operations are necessary based upon our observations during our site visit. Short or mowed dry grasses may be pulverized and lost within fill materials provided no concentrated pockets of organics result. It is the responsibility of the grading contractor to remove excess organics from the fill materials. **No more than 2 percent of organic material, by weight, should be allowed within the fill materials at any given location.**

General site clearing should also include removal of any loose or saturated materials within the proposed structural improvement and pavement areas. A representative of our firm should be present during site clearing operations to identify the location and depth of potential fills not disclosed by this report, to observe removal of deleterious materials, and to identify any existing site conditions which may require mitigation or further recommendations prior to site development. Preserved trees may require tree root protection which should be addressed on an individual basis by a qualified arborist.

Expansive Clay Mitigation: Expansive clays are expected to be periodically encountered during grading and improvement operations. Recommendations have been provided in Sections 3 and 5 for the mitigation of these soils.

Overexcavation and Recompaction of Loose Native Soils: Following general site clearing, all loose soils should be overexcavated down to firm native materials. Loose soils are anticipated to be present throughout the project site extending to depths of approximately 12 inches. Any depressions extending below final grade resulting from the removal of loose/soft materials or other deleterious materials should be properly prepared as discussed below and backfilled with engineered fill.

Exposed Grade Compaction: Exposed soil grades following initial site preparation activities and overexcavation operations should be scarified to a minimum depth of 12 inches and compacted to the requirements for engineered fill. Prior to placing fill, the exposed subgrades should be in a firm and unyielding state. Any localized zones of soft or pumping soils observed within a subgrade should either be scarified and recompacted or be overexcavated and replaced with engineered fill as detailed in the engineered fill section below.

Soil Moisture Considerations
The near-surface soils may become partially or completely saturated during the rainy season. Grading operations during this time period may be difficult since compaction efforts may be hampered by saturated materials. Therefore, we suggest that consideration be given to the seasonal limitations and costs of winter grading operations on the site. Special attention should be given regarding the drainage of the project site.

If the project is expected to work through the wet season, the contractor should install appropriate temporary drainage systems at the construction site and should minimize traffic over exposed subgrades due to the moisture-sensitive nature of the on-site soils. During wet weather operations, the soil should be graded to drain and should be sealed by rubber tire rolling to minimize water infiltration.

Compaction Equipment
In areas to receive structural soil fill, we anticipate that a CAT 815 or approved equivalent will be capable of achieving the compaction requirements for engineered fill provided the soil is placed and compacted within 0 to 3 percent of the optimum moisture content as determined by the ASTM D1557 test method and in lifts not greater than 12 inches in uncompacted thickness. The use of handheld equipment such as jumping jack or plate vibration compactors may require thinner lifts of 6 inches or less to achieve the desired relative compaction parameters.

Engineered Fill Criteria
All materials placed as fills on the site should be placed as “Engineered Fill" which is observed, tested, and compacted as described in the following paragraphs.

Suitability of Onsite Materials: We expect that soil generated from excavations on the site, excluding deleterious material, may be used as engineered fill provided the material does not exceed 12 inches in maximum dimension.

Import Materials: If imported fill material is needed for this project, import material should be approved by our firm prior to transporting it to the project. It is preferable that import material meet the following requirements:

1. Plasticity index not to exceed 12;
2. "R"-value of equal to or greater than 38;
3. An angle of friction equal to or greater than 32 degrees;
4. Should not contain rocks larger than 6 inches in diameter;
5. Not more than 30 percent passing through the No. 200 sieve.

If these requirements are not met, additional testing and evaluation may be necessary to determine the appropriate design parameters for foundations, pavement, and other improvements.

Fill Placement and Compaction: All areas proposed to receive fill should be scarified to a minimum depth of 12 inches, moisture conditioned as necessary, and compacted to at least 90 percent of the maximum dry density based on the ASTM D1557 test method. The fill should be placed in thin horizontal lifts not to exceed 12 inches in uncompacted thickness. The fill should be moisture conditioned as necessary and compacted to a relative compaction of not less than 90 percent based on the ASTM D1557 test method. The upper 8 inches of fills placed under proposed pavement areas should be compacted to a relative compaction of not less than 95 percent based on the ASTM D1557 test method. Fill soil compaction should be evaluated by means of in-place

density tests performed during fill placement so that adequacy of soil compaction efforts may be determined as earthwork progresses.

Slope Configuration and Grading

Proposed cut and fill slopes for the project site shoud be constructed with a maximum slope orientation of 2H:1V (Horizontal:Vertical). Generally a cut slope orientation of 2H:1V is considered stable with the material types encountered on the site. A fill slope constructed at the same orientation is considered stable if compacted to the engineered fill recommendations as stated in the recommendations section of this report. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Slope Face Compaction: All slope fills should be laterally overbuilt and cut back such that the required compaction is achieved at the proposed finish slope face. As a less preferable alternative, the slope face could be track walked or compacted with a wheel. If this second alternative is used, additional slope maintenance may be necessary.

Slope Drainage: Surface drainage should not be allowed to flow uncontrolled over any slope face. Adequate surface drainage control should be designed by the project civil engineer in accordance with the latest applicable edition of the CBC. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Underground Improvements

Trench Excavation: Trenches or excavations in soil should be shored or sloped back in accordance with current OSHA regulations prior to persons entering them. The potential use of a shield to protect workers cannot be precluded. Refer to the Excavation Characteristics section of Site Grading and Improvements of this report for anticipated excavation conditions.

Backfill Materials: Backfill materials for utilities should conform to the requirements of the local jurisdiction. It should be realized that permeable backfill materials will likely carry water at some time in the future.

When backfilling within structural footprints, compacted low permeability materials are recommended to be used a minimum of 5 feet beyond the structural footprint to minimize moisture intrusion. If a permeable material is used as backfill within this zone, subdrainage mitigation may be required. In addition, if the structure is oriented below the roadway and associated utilities, grout cutoffs and/or plug and drains around all utility penetrations are useful to keep moisture out from underneath the structure.

Backfill Compaction: Backfill compaction should conform to the requirements of the local jurisdiction. Where backfill compaction is not specified by the local jurisdiction, the backfill should be compacted to a minimum of 90 percent relative compaction per the ASTM D1557 test method. Compaction should be accomplished using lifts which do not exceed 12 inches when compacting with a backhoe or larger equipment equipped with a compaction wheel. However, thickness of the lifts should be determined by the contractor. If the contractor can achieve the required compaction using thicker lifts, the method may be judged acceptable based on field verification by a representative of our firm using standard density testing procedures. Lightweight compaction equipment may require thinner lifts to achieve the required densities.

5.0 DESIGN RECOMMENDATIONS

Seismic Criteria

Based on the 2016 California Building Code, Chapter 16, and our site investigation findings, the following seismic parameters are recommended from a geotechnical perspective for structural design. The final choice of design parameters, however, remains the purview of the project structural engineer.

Table 2: Seismic Design Parameters

2016 CBC	ASCE 7-10	Seismic Parameter	Recommended Value
	Table 20.3-1	Site Class	D
Figure 1613.3.1(1)		Short-Period MCE at 0.2s, S_S	0.725g
Figure 1613.3.1(2)		1.0s Period MCE, S_1	0.303g
Table 1613.3.3(1)		Site Coefficient, F_a	1.220
Table 1613.3.3(2)		Site Coefficient, F_v	1.793
Equation 16-37		Adjusted MCE Spectral Response Parameters, $S_{MS} = F_a S_s$	0.884g
Equation 16-38		Adjusted MCE Spectral Response Parameters, $S_{M1} = F_v S_1$	0.554g
Equation 16-39		Design Spectral Acceleration Parameters, $S_{DS} = ⅔ S_{MS}$	0.590g
Equation 16-40		Design Spectral Acceleration Parameters, $S_{D1} = ⅔ S_{M1}$	0.363g
Table 1613.3.5(1)		Seismic Design Category (Short Period), Occupancy I to IV	D
Table 1613.3.5(2)		Seismic Design Category (1-Second Period), Occupancy I to IV	D
	Figure 22-7	Maximum Considered Earthquake Geometric Mean (MCE_C) PGA	0.247g
	Table 11.8-1	Site Coefficient F_{PGA}	1.306
	Equation 11.8-1	$PGA_M = F_{PGA}$ PGA	0.322g

*Based on the online calculator available at http://earthquake.usgs.gov/designmaps/us/application.php

Shallow Conventional Foundations

We offer the following comments and recommendations for purposes of design and construction of shallow continuous and/or isolated pad foundations. The provided minimums do not constitute a structural design of foundations which should be performed by the structural engineer. Our firm should be afforded the opportunity to review the project grading and foundation plans to confirm the applicability of the recommendations provided below. Modifications to these recommendations may be made at the time of our review. In addition to the provided recommendations, foundation design and construction should conform to applicable sections of the 2016 California Building Code.

Continuous Foundation Bearing Capacities: An allowable dead plus live load bearing pressure of 2,000 psf may be used for design of conventional shallow foundations based on firm native soils or engineered fills. The allowable pressures are for support of dead plus live loads and may be increased by 1/3 for short-term wind and seismic loads.

Foundation Lateral Pressures: Lateral forces on structures may be resisted by passive pressure acting against the sides of shallow footings and/or friction between the soil and the bottom of the

footing. For resistance to lateral loads, a friction factor of 0.30 may be utilized for sliding resistance at the base of conventional shallow foundations in firm native materials or engineered fill. A passive resistance of 300 pcf equivalent fluid weight may be used against the side of conventional shallow footings in firm native soil or engineered fill. If friction and passive pressures are combined, the lesser value should be reduced by 50 percent.

Foundation Settlement: A total settlement of less than 1 inch is anticipated; a differential settlement of ½ of the total is anticipated where foundations are bearing on like materials. This settlement is based upon the assumption that foundation will be sized and loaded in accordance with the recommendations in this report.

Foundation Configuration: Conventional shallow foundations should be a minimum of 12 inches wide and founded a minimum of 18 inches below the lowest adjacent soil grade. Isolated pad foundation should be a minimum of 24 inches in diameter.

Foundation reinforcement should be provided by the structural engineer. The reinforcement schedule should account for typical construction issues such as load consideration, concrete cracking, and the presence of isolated irregularities. At a minimum, we recommend that continuous footing foundations reinforcing steel for residential structures should consist of a minimum of four No. 4 reinforcing bars; two each top and bottom at all areas of the foundation.

All footings should be founded below an imaginary 2H:1V plane projected up from the bottoms of adjacent footings and/or parallel utility trenches, or to a depth that achieves a minimum horizontal clearance of 6 feet from the outside toe of the footings to the slope face, whichever requires a deeper excavation.

Subgrade Conditions: Footings should not be cast atop soft, loose, organic, slough, debris, nor atop subgrades covered by ice or standing water. Footings should not be cast atop expansive soils. If expansive soils are encountered in footing excavations bottoms, deeper footing excavations may be required to embed the footings into non-expansive firm native soils. Additionally, where clay soils are encountered, the footings, slab, and flatwork areas should be presaturated to a minimum depth of 8 inches for a minimum of 24 hours and should be evaluated by a representative of our firm 24 to 48 hours prior to the placement of concrete. Moisture samples may be obtained to evaluate the suitability of the moisture conditions. A representative of our firm should be retained to observe all subgrades during footing excavations and prior to concrete placement so that a determination as to the adequacy of subgrade preparation can be made.

Shallow Footing / Stemwall Backfill: All footing/stemwall backfill soil should be compacted to at least 90 percent of the maximum dry density (based on ASTM D1557).

Slab-on-Grade Construction

It is our opinion that soil-supported slab-on-grade floors could be used for the main floors of the residential structures, contingent on proper subgrade preparation. Often the geotechnical issues regarding the use of slab-on-grade floors include proper soil support and subgrade preparation, proper transfer of loads through the slab underlayment materials to the subgrade soils, and the anticipated presence or absence of moisture at or above the subgrade level. We offer the following comments and recommendations concerning support of slab-on-grade floors. The slab design (concrete mix, reinforcement, joint spacing, moisture protection, and underlayment materials) is the purview of the project Structural Engineer.

Slab Subgrade Preparation: All subgrades proposed to support slab-on-grade floors should be prepared and compacted to the requirements of engineered fill as discussed in the Site Grading and Improvements section of this report.

Slab Underlayment: For residential construction, the concrete slab underlayment should be constructed in accordance with Section 4.505.2.1 of the 2016 California Green Code. As a minimum for slab support conditions, the slab should be underlain by a minimum 4 inch crushed rock layer and covered by a minimum 10-mil thick moisture retarding plastic membrane. The membrane may only be functional when it is above the vapor sources and should be placed immediately below the concrete slab. The bottom of the crushed rock layer should be above the exterior grade to act as a capillary break and not a reservoir, unless it is provided with an underdrain system. The slab design and underlayment should be in accordance with ASTM E1643 and E1745.

A sand blotter is commonly placed below the concrete slab to aid in curing. If the blotter sand layer is omitted (as may be required if slab design and construction is to be performed according to the 2016 Green Building Code), special wet curing procedures will be necessary. In all cases, development of appropriate slab mix design and curing procedures remains the purview of the project structural engineer.

Slab Moisture Protection: Due to the potential for landscape to be present directly adjacent to the slab edge/foundation or for drainage to be altered following our involvement with the project, varying levels of moisture below, at, or above the pad subgrade level should be anticipated. The slab designer should include the potential for moisture vapor transmission when designing the slab. Our experience has shown that vapor transmission through concrete is controlled through slab thickness as well as proper concrete mix design.

It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

Slab Thickness and Reinforcement: Geotechnical reports have historically provided minimums for slab thickness and reinforcement for general crack control. The concrete mix design and construction practices can additionally have a large impact on concrete crack control. All concrete should be anticipated to crack. As such, these minimums should not be considered to be stand alone items to address crack control, but are suggested to be considered in the slab design methodology.

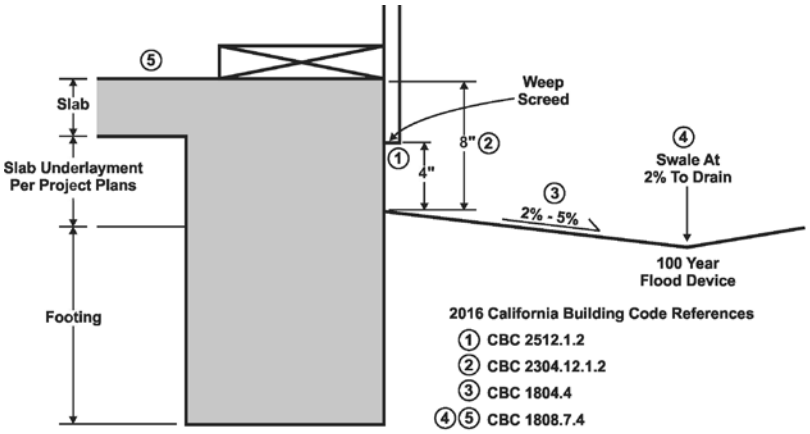
In order to help control the growth of cracks in interior concrete from becoming significant, we suggest the following minimums. Interior concrete slabs-on-grade not subject to heavy loads should be a minimum of 4 inches thick. A 4 inch thick slab should be reinforced. A minimum of No. 3 deformed reinforcing bars placed at 24 inches on center both ways, at the center of the structural section is suggested. Joint spacing should be provided by the structural engineer. Troweled joints recovered with paste during finishing or “wet sawn” joints should be considered every 10 feet on center. Expansion joint felt should be provided to separate floating slabs from foundations and at least at every third joint. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Vertical Deflections: Soil-supported slab-on-grade floors can deflect downward when vertical loads are applied, due to elastic compression of the subgrade. For design of concrete floors, a modulus of subgrade reaction of k = 150 psi per inch would be applicable for native soils and engineered fills.

Exterior Flatwork: Exterior concrete flatwork is recommended to have a 4 inch rock cushion. This could consist of vibroplate compacted crushed rock or compacted ¾ inch aggregate baserock.

If exterior flatwork concrete is against the floor slab edge without a moisture separator it may transfer moisture to the floor slab. Expansion joint felt should be provided to separate exterior flatwork from foundations and at least at every third joint. Contraction / groove joints should be provided to a depth of at least 1/4 of the slab thickness and at a spacing of less than 30 times the slab thickness for unreinforced flatwork, dividing the slab into nearly square sections. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Drainage Adjacent to Slabs: All grades should provide rapid removal of surface water runoff; ponding water should not be allowed on building pads or adjacent to foundations or other structural improvements (during and following construction). All soils placed against foundations during finish grading should be compacted to minimize water infiltration. Finish and landscape grading should include positive drainage away from all foundations. Section 1808.7.4 of the 2016 California Building Code (CBC) states that for graded soil sites, the top of any exterior foundation shall extend above the elevation of the street gutter at the point of discharge or the inlet of an approved drainage device a minimum of 12 inches plus 2 percent. If overland flow is not achieved adjacent to buildings, the drainage device should be designed to accept flows from a 100 year event. Grades directly adjacent to foundations should be no closer than 8 inches from the top of the slab (CBC 2304.12.1.2), and weep screeds are to be placed a minimum of 4 inches clear of soil grades and 2 inches clear of concrete or other hard surfacing (CBC 2512.1.2). From this point, surface grades should slope a minimum of 2 percent away from all foundations for at least 5 feet but preferably 10 feet, and then 2 percent along a drainage swale to the outlet (CBC 1804.4). Downspouts should be tight piped via an area drain network and discharged to an appropriate non-erosive outlet away from all foundations.



Typical 2016 California Building Code Drainage Requirements

The above referenced elements pertaining to drainage of the proposed structures is provided as general acknowledgement of the California Building Code requirements, restated and graphically illustrated for ease of understanding. Surface drainage design is the purview of the Project Architect/Civil Engineer. Review of drainage design and implementation adjacent to the building envelopes is recommended as performance of these improvements is crucial to the performance of the foundation and construction of rigid improvements.

It should be noted that due to the Americans with Disabilities Act (ADA) requirements, design and construction of alternative site drainage configurations may be necessary, particularly for multi-family developments. In this case, design and construction of adequate drainage adjacent to foundations and slabs are essential to preserving foundation support and reducing the potential for wet slab related issues. A typical example of this condition occurs in developments where the landscape grades are situated at the same elevation as the parking areas so as to not create a drop off between the grades. This condition subsequently results in flat grades between the building, landscape area, and parking lot which do not meet building code requirements.

Asphalt Concrete Pavement Design

We understand that asphalt pavements will be used for the associated roadways. The following comments and recommendations are given for pavement design and construction purposes. All pavement construction and materials used should conform to applicable sections of the latest edition of the California Department of Transportation Standard Specifications.

Subgrade Compaction: After installation of any underground facilities, the upper 8 inches of subgrade soils under pavements sections should be compacted to a minimum relative compaction of 95 percent based on the ASTM D1557 test method at a moisture content near or above optimum. Aggregate bases should also be compacted to a minimum relative compaction of 95 percent based on the aforementioned test method.

Subgrade Stability: All subgrades and aggregate base should be proof-rolled with a full water truck or equivalent immediately before paving, in order to evaluate their condition. If unstable subgrade conditions are observed, these areas should be overexcavated down to firm materials and the resulting excavation backfilled with suitable materials for compaction (i.e. drier native soils or aggregate base). Areas displaying significant instability may require geotextile stabilization fabric within the overexcavated area, followed by placement of aggregate base. Final

determination of any required overexcavation depth and stabilization fabric should be based on the conditions observed during subgrade preparation.

Subgrade Conditions: If expansive soils are encountered in pavement subgrade areas, the expansive soils should be overexcavated down to firm non-expansive native soils and the resulting excavation backfilled with suitable materials for compaction (i.e. non-expansive engineered fill or aggregate base). A representative of our firm should be retained to observe all proposed subgrade preparation and prior to concrete placement so that a determination as to the adequacy of subgrade preparation can be made.

Design Criteria: Critical features that govern the durability of a pavement section include the stability of the subgrade; the presence or absence of moisture, free water, and organics; the fines content of the subgrade soils; the traffic volume; and the frequency of use by heavy vehicles. Soil conditions can be defined by a soil resistance value, or "R-Value," and traffic conditions can be defined by a Traffic Index (TI).

Design Values: The following table provides recommended pavement sections based on the R-Value test (CTM 301) performed on a bulk sample representative of the materials expected to be exposed at subgrade, as well as our experience with similar materials in the area. An R-value of 25 was determined for the silty SAND tested; which was used in our design.

Design values provided are based upon properly drained subgrade conditions. Although the R-Value design to some degree accounts for wet soil conditions, proper surface and landscape drainage design is integral in performance of adjacent street sections with respect to stability and degradation of the asphalt. If clay soils are encountered and cannot be sufficiently blended with non-expansive soils, we should review pavement subgrades to determine the appropriateness of the provided sections, and provide additional pavement design recommendations as field conditions dictate. Even minor clay constituents will greatly reduce the design R-Value.

The recommended design thicknesses presented in the following table were calculated in accordance with the methods presented in the Sixth Edition of the California Department of Transportation Highway Design Manual. A varying range of traffic indices are provided for use by the project Civil Engineer for roadway design.

Table 7: Asphalt Pavement Section Recommendations

Design Traffic Indices	Alternative Pavement Sections (Inches)	
	Asphalt Concrete *	Aggregate Base **
4.5	2.5 3.0	6.5 5.0
5.0	2.5 3.0	7.5 6.5
5.5	3.0 3.5	8.0 7.0
6.0	3.0 3.5	9.5 8.5
6.5	3.5 4.0	10.0 9.0
7.0	4.0 4.5	11.0 10.0

* Asphalt Concrete: must meet specifications for Caltrans Hot Mix Asphalt Concrete
** Aggregate Base: must meet specifications for Caltrans Class II Aggregate Base (R-Value = minimum 78)

Due to the redistribution of materials that occurs during mass grading operations, we should review pavement subgrades to determine the appropriateness of the provided sections.

Portland Cement Concrete Pavement Design

We understand that Portland cement concrete pavements may be considered for various aspects of exterior paving for the site. The American Concrete Institute (ACI) Concrete Pavement Design method (ACI 330R-08) was used for design of the exterior concrete (rigid) pavements at the site. The pavement thicknesses were evaluated based on the soil design parameters provided in the following table.

Table 8: Soil Parameters

Subgrade Soil Description	k, Modulus of Subgrade Reaction*	Base Course
Sandy SILT	150 pci	6 inches

* Based on an R-Value of 25 as recommended above and correlated to a k-Value recommended by ACI 330R.

Based on the subgrade soil parameters shown in the above table, the recommended concrete thicknesses for various traffic descriptions are presented in the table below. The recommended thicknesses provided below assume the use of plain (non-reinforced) concrete pavements.

We recommend that the rigid pavement be placed on at least 6 inches of aggregate base compacted to at least 95 percent of the maximum dry density per the ASTM D 1557 test method. From a geotechnical perspective, contraction joints should be placed in accordance with the American Concrete Institute (ACI) recommendations which include providing a joint spacing about 30 times the slab thickness up to a maximum of 10 feet. The joint patterns should also divide the slab into nearly square panels. If increased joint spacing is desired, reinforcing steel should be installed within the pavement in accordance with ACI recommendations. Final determination of steel reinforcement configurations (if used within the pavements) remains the purview of the Project Structural Engineer.

Table 9: Concrete Pavement Section Recommendations

Category	ADTT*	Pavement Traffic Description	Thickness (inches)	
			3000 psi**	4000 psi**
A	1	Car parking areas and access lanes	4.5	4.5
A	10	Autos, pickups, and panel trucks only	5.0	5.0
B	25	Shopping center entrance and service lanes	6.0	5.5
B	300	Bus parking areas and interior lanes Single-unit truck parking areas and interior lanes	6.5	6.0
C	100	Roadway Entrances and Exterior Lanes	6.5	6.5
C	300		7.0	6.5
C	700		7.0	7.0

* Average Daily Truck Traffic

** 28-day concrete compressive strength

Drainage

In order to maintain the engineering strength characteristics of the soil presented for use in this Geotechnical Engineering Study, maintenance of the building pads will need to be performed. This maintenance generally includes, but is not limited to, proper drainage and control of surface and subsurface water which could affect structural support and fill integrity. A difficulty exists in determining which areas are prone to the negative impacts resulting from high moisture conditions due to the diverse nature of potential sources of water; some of which are outlined in the

paragraph below. We suggest that measures be installed to minimize exposure to the adverse effects of moisture, but this will not guarantee that excessive moisture conditions will not affect the structure.

Some of the diverse sources of moisture could include water from landscape irrigation, annual rainfall, offsite construction activities, runoff from impermeable surfaces, collected and channeled water, and water perched in the subsurface soils on the cemented soil horizon. Some of these sources can be controlled through drainage features installed either by the owner or contractor. Others may not become evident until they, or the effects of the presence of excessive moisture, are visually observed on the property.

Some measures that can be employed to minimize the buildup of moisture include, but are not limited to proper backfill materials and compaction of utility trenches within the footprint of the proposed residential structures; grout plugs at foundation penetrations; collection and channeling of drained water from impermeable surfaces (i.e. roofs, concrete or asphalt paved areas); installation of subdrain/cut-off drain provisions; utilization of low flow irrigation systems; education to the proposed owners of proper design and maintenance of landscaping and drainage facilities that they or their landscaper installs.

Post Construction: All drainage related issues may not become known until after construction and landscaping are complete. Therefore, some mitigation measures may be necessary following site development. Landscape watering is typically the largest source of water infiltration into the subgrade. Given the soil conditions on site, excessive or even normal landscape watering may contribute to groundwater levels rising, which could contribute to moisture related problems and/or cause distress to foundations and slabs, pavements, and underground utilities, as well as creating a nuisance where seepage occurs. In order to mitigate these conditions, additional subdrainage measures may be necessary.

6.0 DESIGN REVIEW AND CONSTRUCTION MONITORING

The design plans and specifications should be reviewed and accepted by Youngdahl Consulting Group, Inc. prior to contract bidding. A review should be performed to determine whether the recommendations contained within this report are still applicable and/or are properly reflected and incorporated into the project plans and specifications.

Construction Monitoring

Construction monitoring is a continuation of the findings and recommendations provided in this report. It is essential that our representative be involved with all grading activities in order for us to provide supplemental recommendations as field conditions dictate. Youngdahl Consulting Group, Inc. should be notified at least two working days before site clearing or grading operations commence, and should observe the stripping of deleterious material, overexcavation of existing fills or loose/soft soils and provide consultation to the Grading Contractor in the field.

Low Impact Development Standards

Low Impact Development or LID standards have become a consideration for many projects in the region. LID standards are intended to address and mitigate urban storm water quality concerns. These methods include the use of Source Controls, Run-off Reduction and Treatment Controls. For the purpose of this report use of Run-off Reduction measures and some Treatment Controls may impact geotechnical recommendations for the project.

Youngdahl Consulting Group, Inc. did not perform any percolation or infiltration testing for the site as part of the Geotechnical Investigation. A review of soil survey and the data collected from

borings indicate that soils within the project are Hydrologic Soil Group C (slow infiltration rate). Based on this condition, use of infiltration type LID methods (infiltration trenches, dry wells, infiltration basins, permeable pavements, etc.) should not be considered without addressing applicable geotechnical considerations/implications. As such, use of any LID measure that would require infiltration of discharge water to surfaces adjacent to structures/pavement or include infiltration type measures should be reviewed by Youngdahl Consulting Group, Inc. during the design process.

Post Construction Monitoring

As described in Post Construction section of this report, all drainage related issues may not become known until after construction and landscaping are complete. Youngdahl Consulting Group, Inc. can provide consultation services upon request that relate to proper design and installation of drainage features during and following site development. In addition, if the development includes use of LID measures maintenance of those features in conformance with the standard of practice and documentation from the designer will be necessary. The impact from infiltration or run-off reduction measures to engineered structures and foundations may not become apparent until after construction. We recommend that all LID measures be inspected and maintained as documented by the designer and if adverse impacts are noted related to the structure or site that Youngdahl Consulting Group, Inc. be retained to review the LID measure and provide additional consulting and options.

7.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. This report has been prepared for the exclusive use of KF Development and their consultants for specific application to the Laguna West Phases II and II project located south of the intersection of Laguna Main Street and Vaux Avenue in Elk Grove, California. Youngdahl Consulting Group, Inc. has endeavored to comply with generally accepted geotechnical engineering practice common to the local area. Youngdahl Consulting Group, Inc. makes no other warranty, expressed or implied.

2. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they be due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may cause this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three years without our review nor should it be used or is it applicable for any properties other than those studied.

3. Section [A] 107.3.4 of the 2016 California Building Code states that, in regard to the design professional in responsible charge, the building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

   WARNING: Do not apply any of this report's conclusions or recommendations if the nature, design, or location of the facilities is changed. If changes are contemplated, Youngdahl Consulting Group, Inc. must review them to assess their impact on this report's applicability. Also note that Youngdahl Consulting Group, Inc. is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of this report's subsurface data or engineering analyses without the express written authorization of Youngdahl Consulting Group, Inc.

4. The analyses and recommendations contained in this report are based on limited windows into the subsurface conditions and data obtained from subsurface exploration. The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations. Should any variations or undesirable conditions be encountered during the development of the site, Youngdahl Consulting Group, Inc. will provide supplemental recommendations as dictated by the field conditions.

5. The recommendations included in this report have been based in part on assumptions about strata variations that may be tested only during earthwork. Accordingly, these recommendations should not be applied in the field unless Youngdahl Consulting Group, Inc. is retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method. Youngdahl Consulting Group, Inc. cannot assume responsibility or liability for the adequacy of its recommendations when they are used in the field without Youngdahl Consulting Group, Inc. being retained to observe construction. Unforeseen subsurface conditions containing soft native soils, loose or previously placed non-engineered fills should be a consideration while preparing for the grading of the property. It should be noted that it is the responsibility of the owner or his/her representative to notify Youngdahl Consulting Group, Inc., in writing, a minimum of 48 hours before any excavations commence at the site.

6. Our experience has shown that vapor transmission through concrete is controlled through proper concrete mix design. As such, proper control of moisture vapor transmission should be considered in the design of the slab as provided by the project architect, structural or civil engineer. It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

7. Following site development, additional water sources (i.e. landscape watering, downspouts) are generally present. The presence of low permeability materials can prohibit rapid dispersion of surface and subsurface water drainage. Utility trenches typically provide a conduit for water distribution. Provisions may be necessary to mitigate adverse effects of perched water conditions. Mitigation measures may include the construction of cut-off systems and/or plug and drain systems. Close coordination between the design professionals regarding drainage and subdrainage conditions may be warranted.

Table 10: Checklist of Recommended Services

	Item Description	Recommended	Not Anticipated
1	Provide foundation design parameters	Included	
2	Review grading plans and specifications	✓	
3	Review foundation plans and specifications	✓	
4	Observe and provide recommendations regarding demolition		✓
5	Observe and provide recommendations regarding site stripping	✓	
6	Observe and provide recommendations on moisture conditioning removal, and/or recompaction of unsuitable existing soils	✓	
7	Observe and provide recommendations on the installation of subdrain facilities	✓	
8	Observe and provide testing services on fill areas and/or imported fill materials	✓	
9	Review as-graded plans and provide additional foundation recommendations, if necessary	✓	
10	Observe and provide compaction tests on storm drains, water lines and utility trenches	✓	
11	Observe foundation excavations and provide supplemental recommendations, if necessary, prior to placing concrete	✓	
12	Observe and provide moisture conditioning recommendations for foundation areas and slab-on-grade areas prior to placing concrete		✓
13	Provide design parameters for retaining walls		✓
14	Provide finish grading and drainage recommendations	Included	
15	Provide geologic observations and recommendations for keyway excavations and cut slopes during grading		✓
16	Excavate and recompact all test pits within structural areas		✓

APPENDIX A

Field Study

Vicinity Map
Site Plan
Logs of Exploratory Borings
Soil Classification Chart and Log Exploration

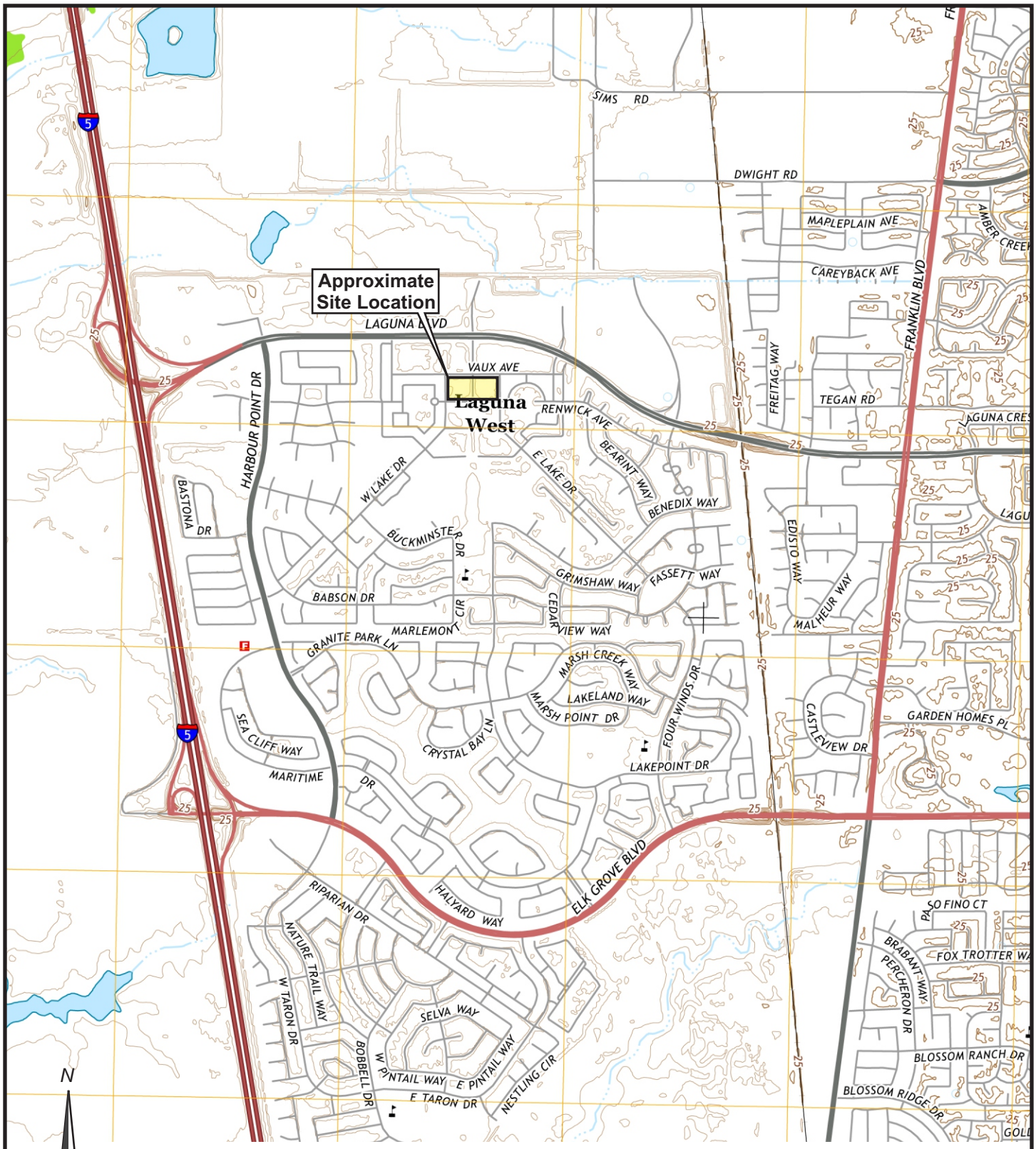
Introduction

The contents of this appendix shall be integrated with the Geotechnical Engineering Study of which it is a part. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

Our field study included a site reconnaissance by a Youngdahl Consulting Group, Inc. representative followed by a subsurface exploration program conducted on 21 November 2017, which included the advancement of 5 borings under his direction at the approximate locations shown on Figure A-2, this Appendix. Drilling of the exploratory borings was accomplished with a CME-55 track mounted drill rig.

Throughout the drilling operation, soil samples were obtained at 5-foot depth intervals by means of a Modified California Sampler. This testing and sampling procedure consists of driving the steel sampler 18 inches into the soil with a 140-pound hammer free-falling 30 inches. The number of blows required to drive the sampler through each 6-inch interval is counted, and the total number of blows struck during the final 12 inches is recorded. If a total of 50 blows are struck within any 6-inch interval, the driving is stopped and the blow count is recorded as 50 blows for the actual penetration distance.

The soils encountered were logged during drilling and provide the basis for the "Boring Logs," Figures A-3 through A-7, this Appendix. The enclosed Boring Logs describe the vertical sequence of soils and materials encountered in each boring, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a soil contact was observed to be gradational, our logs indicate the average contact depth. Where a soil type changed between sample intervals, we inferred the contact depth. Our logs also graphically indicate the blow count, sample type, sample number, and approximate depth of each soil sample obtained from the borings, as well as any laboratory tests performed on these soil samples. If any groundwater was encountered in a borehole, the approximate groundwater depth is depicted on the boring log. Groundwater depth estimates are typically based on the moisture content of soil samples, the wetted height on the drilling rods, and the water level measured in the borehole after the auger has been extracted.



Scale: 1:24,000

BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Florin Quadrangle, Dated 2015*

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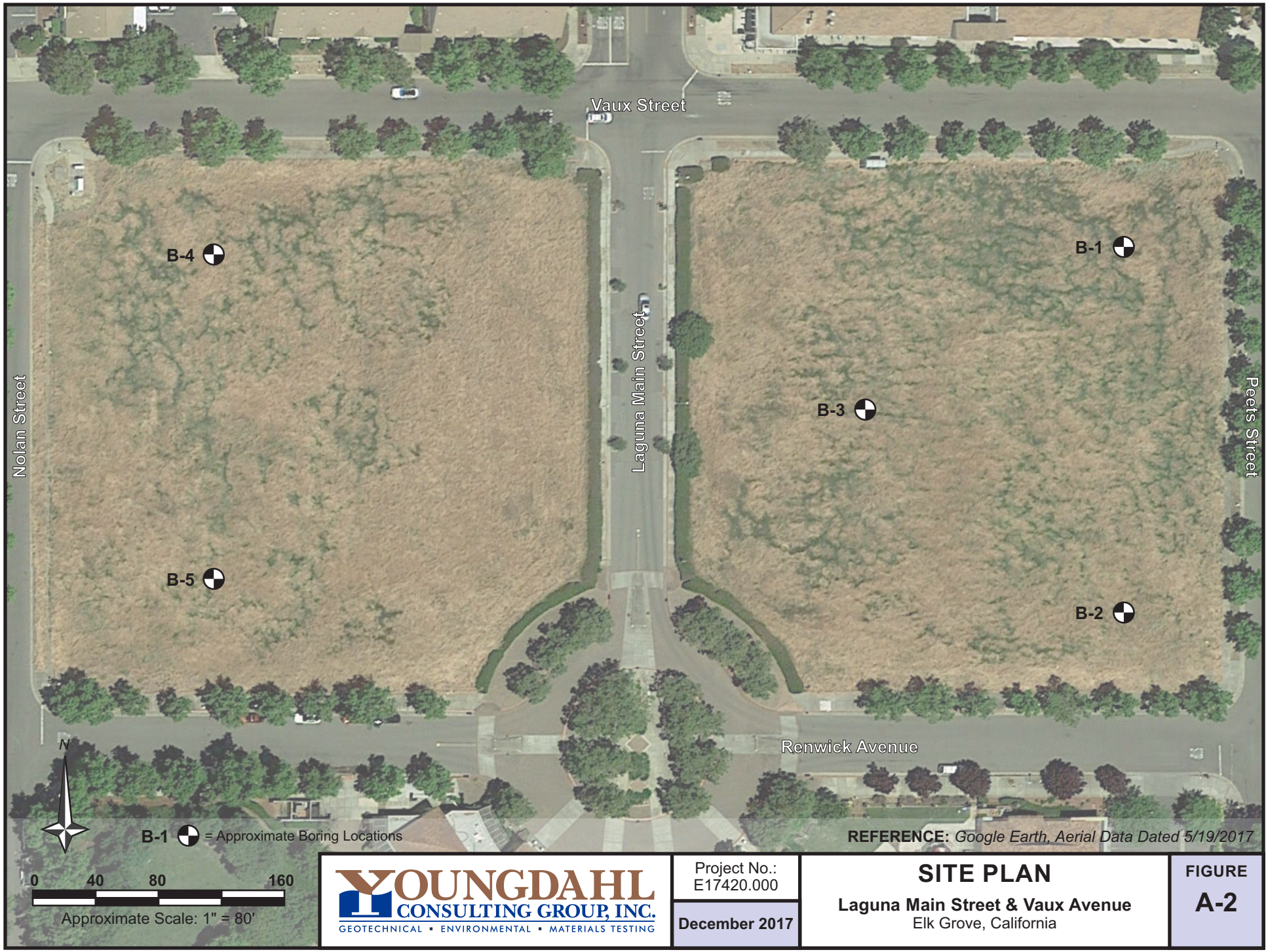
VICINITY MAP

Laguna Main Street & Vaux Avenue
Elk Grove, California

FIGURE
A-1



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SITE PLAN

Laguna Main Street & Vaux Avenue
Elk Grove, California

FIGURE
A-2

Logged By: **MRG**	Date: **21 November 2017**	Lat / Lon: **~ / ~**	Boring No. **B-1**
Equipment: **CME-55 Track Mounted Drill Rig**		Elevation: **~**	

Depth (Feet)	Graphic Log	Ground Water	Geotechnical Description & Unified Soil Classification	Sample	Blow Counts	Pocket Pen (tsf)	Dry Density (pcf)	Moisture Content (%)	Tests & Comments
0			Brown silty fine **SAND (SM)** with trace clay, medium dense, moist						
1			*Grades yellow brown, slightly moist*		16				
2							97.2	6.2	
3			*Grades dark brown to brown, and mottled orange brown, coarse grained, loose*		8				
4									
5			Yellow brown clayey medium to coarse **SAND (SC)**, medium dense, slightly moist						
6							117.3	13.1	
7					25				
8									
9									
10			*Grades brown, medium grained, with silt, dense, moist*						
11			Yellow brown coarse **SAND (SP)** with trace clay, dense, moist			4.5+			
12			Brown grey and mottled orange brown fine sandy **SILT (ML)** with trace clay, hard, slightly moist		37	4.0			
13									
14			Grey brown fine to medium sandy **CLAY (CL)** with silt, hard, moist						
15			Grey fine sandy **SILT (ML)**, weakly to moderately cemented, hard, slightly moist		55				
16			Boring terminated at 15'						
17			No groundwater encountered						
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									

Note: The boring log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations. Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY BORING LOG

Laguna Main Street & Vaux Avenue
Elk Grove, California

FIGURE A-3

Logged By: **MRG**	Date: **21 November 2017**	Lat / Lon: **~ / ~**	Boring No. **B-2**
Equipment: **CME-55 Track Mounted Drill Rig**		Elevation: **~**	

Depth (Feet)	Graphic Log	Ground Water	Geotechnical Description & Unified Soil Classification	Sample	Blow Counts	Pocket Pen (tsf)	Dry Density (pcf)	Moisture Content (%)	Tests & Comments
1			Orange brown silty fine to medium **SAND (SM)**, loose, slightly moist						
2			*Grades weakly cemented, medium dense*						
3			Yellow brown fine sandy **CLAY (CL)** with silt, very stiff, slightly moist		27	4.5+			
4			Orange brown to brown grey silty fine **SAND (SM)**, weakly to moderately cemented, very dense, moist				106.4	15.2	
5					81				
6									
7			*Grades medium dense*				100.9	22.9	
8			Grey and mottled orange fine sandy **SILT (ML)**, weakly to moderately cemented, very stiff, moist		39	4.5+ 4.5+			
9									
10									
11									
12			Grey brown fine to medium silty **SAND (SM)**, weakly cemented, medium dense, moist						
13					20	4.5+ 4.5+			
14									
15			Boring terminated at 15' No groundwater encountered						
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									

Note: The boring log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations. Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY BORING LOG

Laguna Main Street & Vaux Avenue
Elk Grove, California

FIGURE A-4

Logged By: **MRG**	Date: **21 November 2017**	Lat / Lon: **~ / ~**	Boring No. **B-3**
Equipment: **CME-55 Track Mounted Drill Rig**		Elevation: **~**	

Depth (Feet)	Graphic Log	Ground Water	Geotechnical Description & Unified Soil Classification	Sample	Blow Counts	Pocket Pen (tsf)	Dry Density (pcf)	Moisture Content (%)	Tests & Comments
1			Orange brown silty fine to medium **SAND (SM)**, medium dense, slightly moist						**Bulk 1** @ 0' - 3'
2									
3			*Grades with clay, weakly cemented, dense*						
4					34				
5									
6									
7									
8			*Grades brown, without clay, moist*						
9							109.4	16.4	
10					34	4.5+ 4.5+			Sample disturbed
11									
12									
13			*Grades mottled dark brown and orange, medium dense*						
14						4.5+			
15					26	4.5+			
16									
17									
18			*Grades brown*						
19			*Grades with some caliche stains*			4.5+			
20					52	4.5+			
21			Boring terminated at 20' No groundwater encountered						
22									
23									
24									
25									
26									
27									

Note: The boring log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations. Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY BORING LOG

Laguna Main Street & Vaux Avenue
Elk Grove, California

FIGURE A-5

Logged By: **MRG**	Date: **21 November 2017**	Lat / Lon: **~ / ~**	Boring No. **B-4**
Equipment: **CME-55 Track Mounted Drill Rig**		Elevation: **~**	

Depth (Feet)	Graphic Log	Ground Water	Geotechnical Description & Unified Soil Classification	Sample	Blow Counts	Pocket Pen (tsf)	Dry Density (pcf)	Moisture Content (%)	Tests & Comments
0			Brown silty fine **SAND (SM)**, medium dense, slightly moist						
1			*Grades medium grained, with trace clay*						
2			Yellow brown and mottled black **CLAY (CL)** with trace fine sand, stiff, moist		15	4.5+ 4.0			
3									
4									
5			*Grades sandy, with silt, moderately cemented, hard, slightly moist*						
6			Yellow brown silty fine **SAND (SM)** with clay, weakly cemented, dense, slightly moist		59				
7									
8			*Grades medium to coarse grained, without clay, uncemented*						
9									
10			Light brown grey fine sandy **SILT (ML)** with clay, hard, slightly moist		44	4.5+ 4.5+			
11									
12									
13									
14			*Grades brown, without clay, moist*						
15			*Grades grey brown, fine grained sand*						Sample disturbed
16			Brown grey silty fine to medium **SAND (SM)**, weakly cemented, dense, moist, with caliche stains		50				
17									
18			Yellow brown sandy **SILT (ML)**, very stiff, moist						
19			Light brown grey silty **SAND (SM)**, medium dense, moist		35	4.5 4.5			
20			Boring terminated at 20' No groundwater encountered						
21									
22									
23									
24									
25									
26									
27									

Note: The boring log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations. Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY BORING LOG

Laguna Main Street & Vaux Avenue
Elk Grove, California

FIGURE A-6

Logged By: **MRG**	Date: **21 November 2017**	Lat / Lon: **~ / ~**	Boring No. **B-5**
Equipment: **CME-55 Track Mounted Drill Rig**		Elevation: **~**	

Depth (Feet)	Graphic Log	Ground Water	Geotechnical Description & Unified Soil Classification	Sample	Blow Counts	Pocket Pen (tsf)	Dry Density (pcf)	Moisture Content (%)	Tests & Comments
1			Brown silty fine to coarse **SAND (SM)** with clay, medium dense, moist, with roots and grass observed						**Bulk 2** @ 0' - 3'
2									ϕ = 33.1° c = 193 psf
3									MDD: 119.5 pcf
4			Yellow brown sandy **CLAY (CL)** with silt, hard, slightly moist			4.5+			MC: 9.3%
5			Orange brown silty fine **SAND (SM)** with clay, dense, slightly moist		66				R = 25
6									
7									
8			Light brown to brown grey and mottled orange fine sandy **SILT (ML)**, hard, moist		48	4.5+			
9									
10									
11			*Grades brown grey, silty*						
12			*Grades mottled orange and black, with trace fine sand*						
13					45		110.4	21.0	
14									
15									
16			Boring terminated at 15' No groundwater encountered						
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									

Note: The boring log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations. Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY BORING LOG

Laguna Main Street & Vaux Avenue
Elk Grove, California

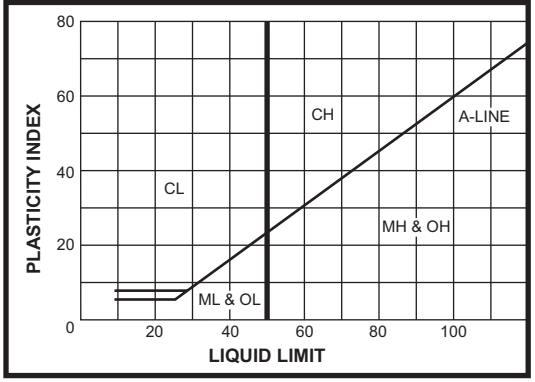
FIGURE A-7

UNIFIED SOIL CLASSIFICATION SYSTEMS

MAJOR DIVISION			SYMBOLS		TYPICAL NAMES
COARSE GRAINED SOILS Over 50% > #200 sieve	GRAVELS Over 50% > #4 sieve	Clean GRAVELS With Little Or No Fines	GW		Well graded **GRAVELS**, **GRAVEL-SAND** mixtures
			GP		Poorly graded **GRAVELS**, **GRAVEL-SAND** mixtures
		GRAVELS With Over 12% Fines	GM		Silty **GRAVELS**, poorly graded **GRAVEL-SAND-SILT** mixtures
			GC		Clayey **GRAVELS**, poorly graded **GRAVEL-SAND-CLAY** mixtures
	SANDS Over 50% < #4 sieve	Clean SANDS With Little Or No Fines	SW		Well graded **SANDS**, gravelly **SANDS**
			SP		Poorly graded **SANDS**, gravelly **SANDS**
		SANDS With Over 12% Fines	SM		Silty **SANDS**, poorly graded **SAND-SILT** mixtures
			SC		Clayey **SANDS**, poorly graded **SAND-CLAY** mixtures
FINE GRAINED SOILS Over 50% < #200 sieve	SILTS & CLAYS Liquid Limit < 50		ML		Inorganic **SILTS**, silty or clayey fine **SANDS**, or clayey **SILTS** with plasticity
			CL		Inorganic **CLAYS** of low to medium plasticity, gravelly, sandy, or silty **CLAYS**, lean **CLAYS**
			OL		Organic **CLAYS** and organic silty **CLAYS** of low plasticity
	SILTS & CLAYS Liquid Limit > 50		MH		Inorganic **SILTS**, micaceous or diamacious fine sandy or silty soils, elastic **SILTS**
			CH		Inorganic **CLAYS** of high plasticity, fat **CLAYS**
			OH		Organic **CLAYS** of medium to high plasticity, organic **SILTS**
HIGHLY ORGANIC CLAYS			PT		PEAT & other highly organic soils

PLASTICITY CHART

USED FOR CLASSIFICATION OF FINE GRAINED SOILS

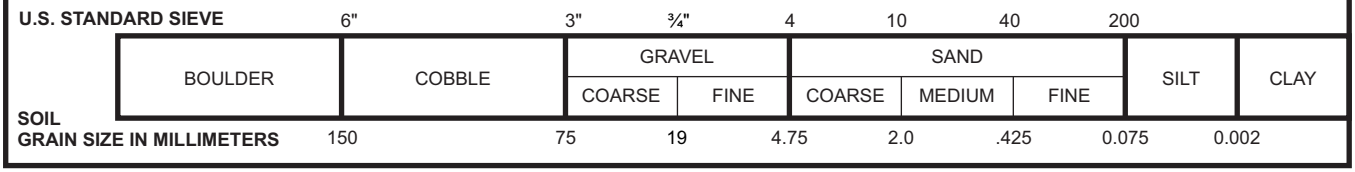


SAMPLE DRIVING RECORD

BLOWS PER FOOT	DESCRIPTION
25	25 Blows drove sampler 12 inches, after initial 6 inches of seating
50/7"	50 Blows drove sampler 7 inches, after initial 6 inches of seating
50/3"	50 Blows drove sampler 3 inches during or after initial 6 inches of seating

Note: To avoid damage to sampling tools, driving is limited to 50 blows per 6 inches during or after seating interval.

SOIL GRAIN SIZE



KEY TO PIT & BORING SYMBOLS

- Standard Penetration test
- 2.5" O.D. Modified California Sampler
- 3" O.D. Modified California Sampler
- Shelby Tube Sampler
- 2.5" Hand Driven Liner
- Bulk Sample
- Water Level At Time Of Drilling
- Water Level After Time Of Drilling
- P — Perched Water

KEY TO PIT & BORING SYMBOLS

- Joint
- Foliation
- Water Seepage
- NFWE — No Free Water Encountered
- FWE — Free Water Encountered
- REF — Sampling Refusal
- DD — Dry Density (pcf)
- MC — Moisture Content (%)
- LL — Liquid Limit
- PI — Plasticity Index
- PP — Pocket Penetrometer
- UCC — Unconfined Compression (ASTM D2166)
- TVS — Pocket Torvane Shear
- EI — Expansion Index (ASTM D4829)
- Su — Undrained Shear Strength

YOUNGDAHL CONSULTING GROUP, INC.
GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING

Project No.: E17420.000

December 2017

SOIL CLASSIFICATION CHART AND LOG EXPLANATION
Laguna Main Street & Vaux Avenue
Elk Grove, California

FIGURE A-8

APPENDIX B

Laboratory Testing

Direct Shear
Expansion Index
Modified Proctor Test
R-Value Test
Corrosivity Tests

Introduction

Our laboratory testing program for this evaluation included numerous visual classifications, direct shear, Expansion Index, resistance value, Modified Proctor, and corrosivity tests. The following paragraphs describe our procedures associated with each type of test. Graphical results of certain laboratory tests are enclosed in this appendix. The contents of this appendix shall be integrated with the Geotechnical Engineering Study of which it is a part. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

Laboratory Testing Procedures

Visual Classification: Visual soil classifications were conducted on all samples in the field and on selected samples in our laboratory. All soils were classified in general accordance with the Unified Soil Classification System, which includes color, relative moisture content, primary soil type (based on grain size), and any accessory soil types. The resulting soil classifications are presented on the exploration logs in Appendix A.

Soil Strength Determination: The strength parameters of the foundation soils were based on direct shear tests (ASTM D3080) performed on a representative remolded sample of the near-surface soils. The results of these tests are presented on Figure B-1, this Appendix.

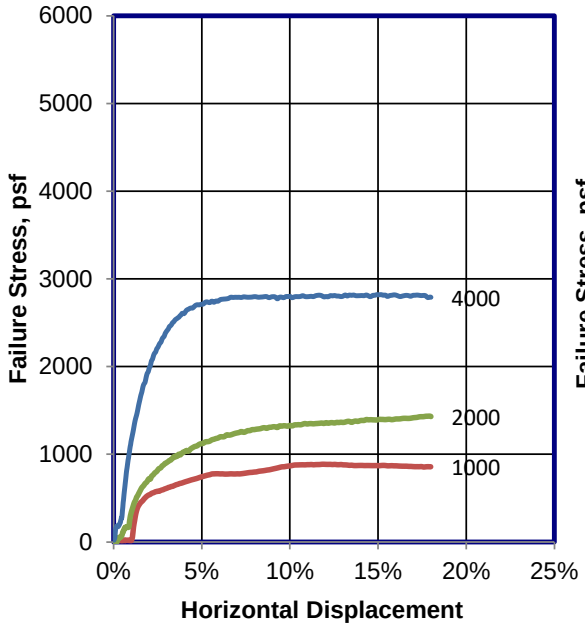
Expansion Index Determination: The Expansion Index test (ASTM D4829) was performed to provide an indication of swelling potential of a compacted soil. The results of this test are presented on Figure B-2, this Appendix.

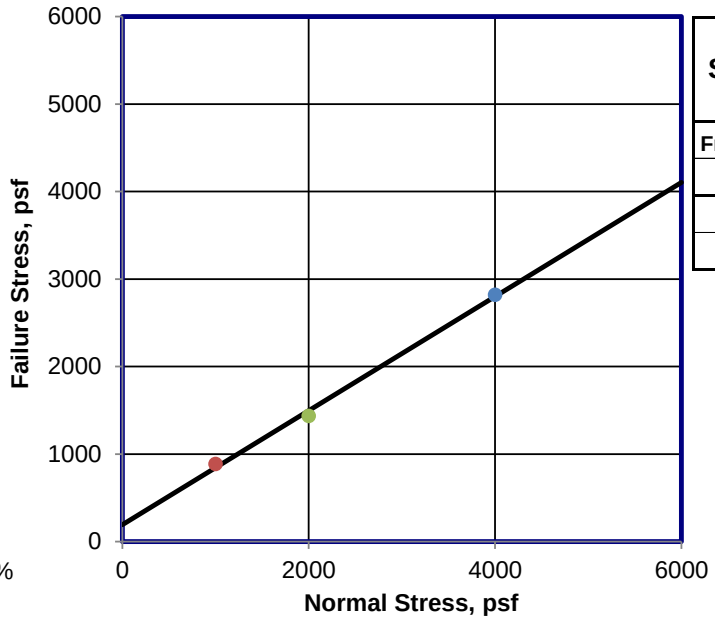
Maximum Dry Density Determination: A modified proctor test (ASTM D1557) was conducted to provide the optimum moisture and maximum dry density on the near surface material. The results of this test are presented on Figure B-3, this Appendix.

Resistance Value Determination: An R-Value test (California Test Method 301 or ASTM D2844) was performed to obtain asphalt concrete pavement design parameters. The results of this test are presented on Figure B-4, this Appendix.

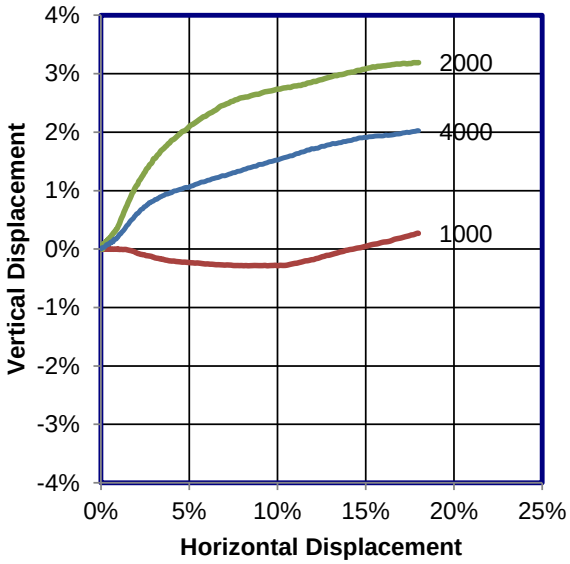
Corrosivity Tests: A corrosivity test typically comprises individual measurements of pH, electrical resistivity, sulfate content, and chloride content, which together indicate the corrosiveness of a soil. Corrosivity tests were performed on selected samples by an independent analytical laboratory working under subcontract to Youngdahl Consulting Group, Inc. The results of these tests are presented on the enclosed analytical certificates, this Appendix.

Direct Shear Test of Soils Under Consolidated Drained Conditions, ASTM D3080





Direct Shearbox Results
Friction Angle
33.1°
Cohesion
193 psf



Test No.		1	2	3
Initial	Wet Density, pcf	117.6	117.6	117.6
	Dry Density, pcf	107.6	107.6	107.6
	Moisture Content, %	9.3	9.3	9.3
	Diameter, in	2.50	2.50	2.50
	Height, in	1.00	1.00	1.00
Pre Shear	Wet Density, pcf	130.1	130.4	128.9
	Dry Density, pcf	110.0	110.0	111.2
	Moisture Content, %*	18.2	18.5	15.9
	Diameter, in	2.50	2.50	2.50
	Height, in	0.98	0.98	0.97
Normal Stress, psf		1000	2000	4000
Failure Stress, psf		886	1435	2821
Failure Strain, %		11.82	17.94	15.17
Rate, in/min		0.002		

*Based on post shear moisture content

Sample Type: Remolded to 90% RC

Material Description: **Brown Silty SAND with trace Gravel**

Source:

Notes: Gravel removed from test sample.

Sample No./Depth:	B5 @ 0-3'	USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled:	11/21/2017				2	
Date Test Started:	12/15/2017					

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Project: **Laguna West Phases II and III**

Project No.: **E17420.000**

Figure B-1

Reviewed By: DN Date: 12/19/2017

Expansion Index of Soils, ASTM D4829

Test Results

Expansion Index	85
Dry Density, as molded, pcf	103.3
Moisture Content, as molded, %	11.4
Final Moisture Content, %	21.8
Initial Saturation, as molded, %	48.9

Classification of Potentially Expansive Soil

Expansion Index, EI	Potential Expansion
0 - 20	Very Low
21 - 50	Low
51 - 90	Medium
91 - 130	High
Above 130	Very High

Material Description: **Brown Sandy CLAY**

Source:

Notes:

Sample No./Depth:	B2 @ 2.5' & 3', B4 @ 2.5' & 3'	USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled: 11/21/2017	Date Test Started: 12/6/2017					

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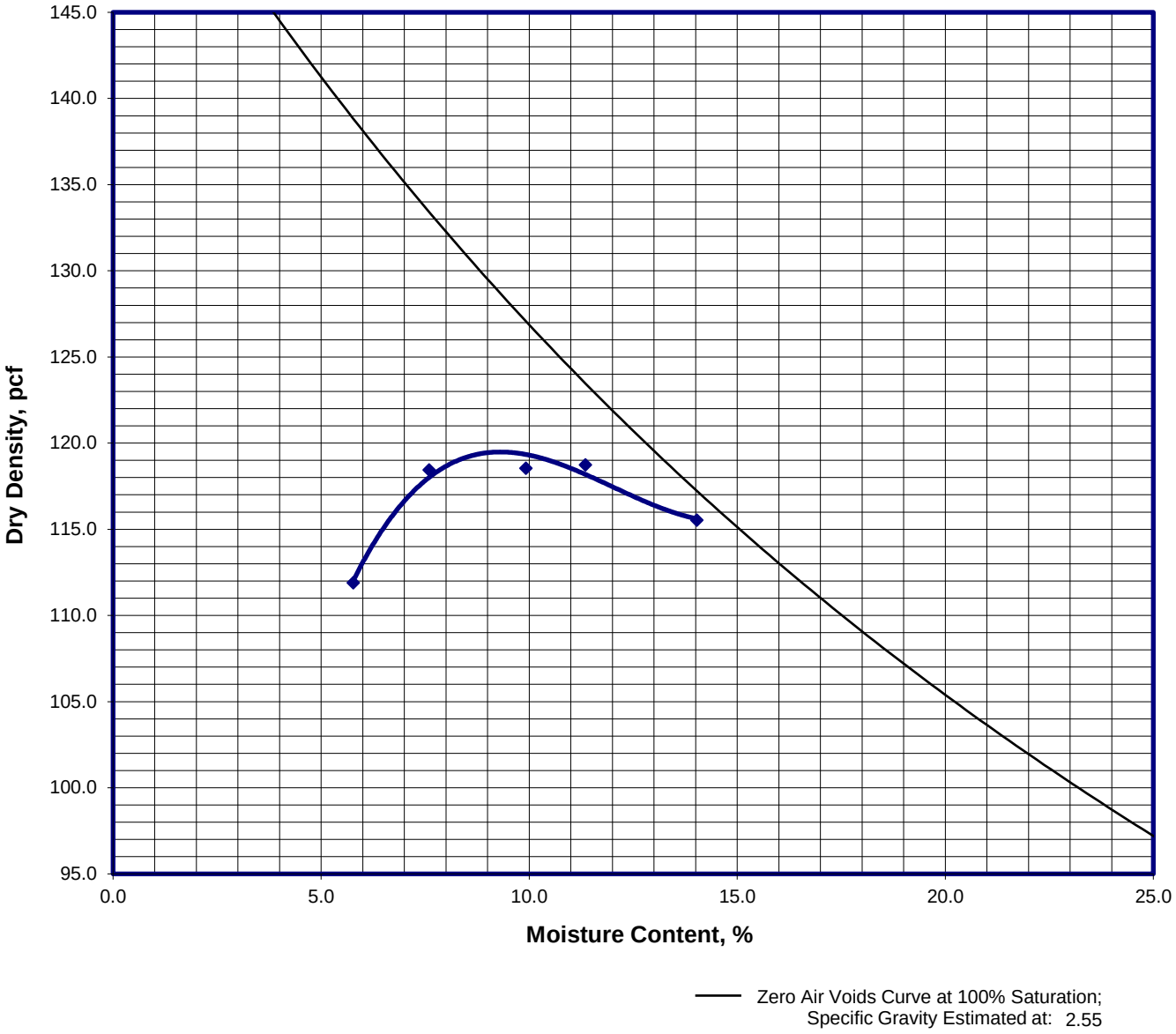
Project No.: **E17420.000**

Figure B-2

Reviewed By: DN Date: 12/19/2017

Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 lf-lbf/ft3), ASTM D1557, Method A



Maximum Dry Density, pcf:	**119.5**	Optimum Moisture Content, %:	**9.3**
Material Description:	**Brown Silty SAND with trace Gravel**		
Source:			
Notes:			

Sample No./Depth:	B-5 @ 0-3'	USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4 :	% Less than No. 200
Date Sampled:	11/21/2017					
Date Test Started:	12/12/2017				2	

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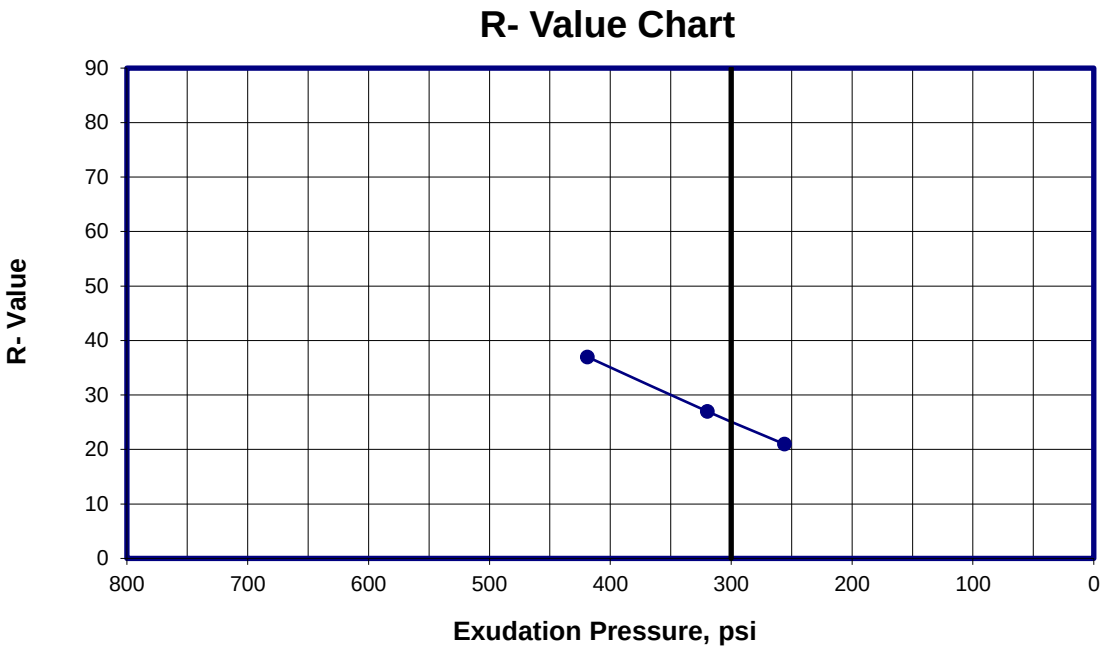
Project:	**Laguna West Phases II and III**		
Project No.:	**E17420.000**		Figure
Reviewed By: CNS		Date: 12/15/2017	B-3

Resistance "R" Value of Soil and Soil-Aggregate Mixtures, CTM 301



Test Specimen No.:	1	2	3
Moisture Content at Test, %	13.0	13.9	14.8
Dry Density at Test, pcf	120.4	118.2	115.8
Expansion Pressure, psf	178	87	13
Exudation Pressure, psi	419	320	256
Resistance "R" Value	37	27	21
"R" Value at 300 psi Exudation Pressure			**25**

Material Description: **Brown Silty SAND**

Source:

Notes:

Sample No./Depth:	B 5 @ 0-3'	USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled: 11/21/2017	Date Test Started: 12/14/2017				0	

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Project: **Laguna West Phases II and III**

Project No.: **E17420.000**

Figure B-4

Reviewed By: JLC Date: 12/19/2017

Sunland Analytical
11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

Date Reported 12/20/2017
Date Submitted 12/13/2017

To: Jeffry Cannon
Youngdahl Consulting Group
1234 Glenhaven Ct.
El Dorado Hills, CA 95630

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : E17420.000 Site ID : B-5@0-3FT.
Thank you for your business.

* For future reference to this analysis please use SUN # 75812-158161.

EVALUATION FOR SOIL CORROSION

Soil pH	7.60		
Minimum Resistivity	2.39 ohm-cm (x1000)		
Chloride	27.3 ppm	00.00273	%
Sulfate	12.4 ppm	00.00124	%

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422

APPENDIX D

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PHASE I ENVIRONMENTAL SITE ASSESSMENT
LAGUNA APARTMENTS
SACRAMENTO COUNTY APNS 119-1110-009, -010, -013 & -014
ELK GROVE, CALIFORNIA

Prepared For

KF Development
9105 Laguna Main Street #130
Elk Grove, CA 95758

Prepared By

Youngdahl Consulting Group, Inc.
1234 Glenhaven Court
El Dorado Hills, California 95762

Project No. E17420.002
November 2020

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CONSULTING GROUP, INC.
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KF Development
9105 Laguna Main Street #130
Elk Grove, CA 95758

Project No. E17420.002
6 November 2020

Attn: Mr. Michael Green

Subject: **LAGUNA APARTMENTS**
Laguna Main Street & Vaux Avenue, Elk Grove, California
Sacramento County Assessor's Parcel Numbers 119-1110-009, -010, -013 & -014
Phase I Environmental Site Assessment

As requested, Youngdahl Consulting Group, Inc. (Youngdahl) has performed a Phase I Environmental Site Assessment (ESA) for the proposed Laguna Apartments project site located south of Vaux Avenue, east of Nolan Street, west of Peets Street, and north of Renwick Avenue in Elk Grove, California (Subject Property). A dry cleaning business has been present since as early as 1998 in the north adjacent property and has used tetrachloroethylene and petroleum distillates as part of their operations as recently as 2012. It is common for dry cleaning businesses to dump waste water with remnant hazardous chemicals down the drain, reaching the municipal sewer system which runs along the northern subject property boundary at Vaux Avenue. If the sewer has leaks, it may have impacted nearby soils and possibly groundwater, creating a soil vapor intrusion risk at the subject property; this is considered a potential recognized environmental condition. No historic RECs (HRECs) or controlled RECs (CRECs) were identified in connection with the property.

This Phase I Environmental Site Assessment has been completed in accordance to the ASTM Practice E 1527-13. Youngdahl Consulting Group, Inc. declares that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Regards,
Youngdahl Consulting Group, Inc.

Reviewed by:

PROFESSIONAL GEOLOGIST
DENNIS S. ECK
No. 9732
EXP. 10-31-21
STATE OF CALIFORNIA

CERTIFIED ENGINEERING GEOLOGIST
DAVID C. SEDERQUIST
NO. 2133
EXPIRATION DATE
9-20-22
STATE OF CALIFORNIA

Dennis S. Eck, P.G.
Project Geologist

David C. Sederquist, C.E.G, C.H.G.
Senior Engineering Geologist/Hydrogeologist

Distribution: 1 PDF: Client

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LAGUNA APARTMENTS
SACRAMENTO COUNTY APNS 119-1110-009, -010, -013, & -014
ELK GROVE, CALIFORNIA 95758

EXECUTIVE SUMMARY

Site Description

The property description referred to herein is based on a Sacramento Assessor's Parcel Map and on a site reconnaissance performed by representatives of Youngdahl Consulting Group, Inc. (Youngdahl). These were also the basis for the "Vicinity Map" - Figure 1. The subject site is rectangular in shape, consists of approximately 6 acres of land, and is assigned Sacramento County Assessor's Parcel Numbers (APNs) 119-1110-009, -010, -013, & -014 in Elk Grove, CA.

The subject property is bounded by Vaux Ave to the north, Nolan Street to the west, Renwick Avenue to the south, and Peets Street to the east. Laguna Main Street trends north-south and bisects the subject property. The site is primarily disced bare land that has underground utilities and utility stub-outs at the periphery. A bus stop is present in the northeastern area, along the south side of Vaux Avenue. An active dry cleaning business was observed on the west side of the north adjacent retail business park, approximately 130 feet from the subject property.

Adjacent Properties

North: Vaux Avenue and a commercial business park.
East: Peets Street and apartment buildings.
South: Renwick Avenue, Laguna Town Hall, Town Square Park, and Laguna Kindercare.
West: Nolan Street and apartment buildings.

Purpose

This Phase I ESA was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-13 standards are consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10).

Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment."

Historic recognized environmental conditions (HRECs) is a term used to state that the property only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions. The term controlled REC (CREC) describes closed RECs that are managed under an activity and use limitation (AUL). De minimis conditions (DMCs) are those situations that do not present a material risk of harm to public health or the environment and generally would not be subject to enforcement action if brought to the attention of the regulating authority.

Summary and Opinion

The Martinizing Dry Cleaning business was observed to be within approximately 130 feet from the subject property boundary. The EDR Report indicates that this location had been a dry cleaning business since as early as 1998. Records provided by Sacramento County indicate that the location has used perchloroethylene and petroleum distillates during dry cleaning activities as recently as 2012. They currently use DF-2000, which contains naphthalene.

Generally, dry cleaning businesses are known for dumping water with small amounts of chemicals still present down the drain over long periods of time. Once these chemicals are in the sewer system, which runs beneath Vaux Ave along the north property boundary, they are able to contaminate surrounding soils and possibly groundwater if the sewer leaks. Contaminants can volatilize into soil vapor, creating a potential vapor intrusion risk at the subject property.

Based on the above, the following RECs were identified in connection with the subject property:

- Due to proximity to the dry cleaning business, there is a soil vapor intrusion risk at the subject property.

No CRECs were identified in connection with the subject property. No HRECs were identified in connection with the subject property. No DMCs were identified in connection with the subject property

Recommendations
It is the opinion of the Youngdahl Consulting Group Inc. that a soil vapor intrusion risk be evaluated by collecting soil gas samples along the subject property boundary adjacent to Vaux Avenue, nearest to the dry cleaner location, and be analyzed for dry cleaning solvents and petroleum distillates.

Site Assessor
A site reconnaissance visit was conducted on 30 October 2020 by Mr. Dennis S. Eck, Youngdahl Consulting Group, Inc., (916) 933-0633, dse@youngdahl.net.

EP Certification
An environmental professional (EP) is defined as a person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). We declare that, to the best of our professional knowledge and opinion, we meet the definition of EP as defined in 40 CFR § 312.10 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property.

AAI Certification
This Phase I Environmental Site Assessment (ESA) was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-13 standard is consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10).

Data Gaps
According to § 3.3.20 of ASTM Standard E 1527-13 a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather same. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. It is our opinion that no significant data gaps were identified.

1.0 INTRODUCTION

1.1 Purpose

This Phase I ESA was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-13 standards are consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40

of the Code of Federal Regulations (40 C.F.R. § 312.10). The ASTM practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

Potential findings per the ASTM Phase I Standards can include recognized environmental conditions (RECs), controlled RECs (CRECs), historical RECs (HRECs), and de minimis conditions (DMCs). A REC is defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. HRECs are a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. CRECs are a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The term "recognized environmental condition" is not intended to include DMCs that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. DMCs are not recognized environmental conditions.

Controlled substances (i.e. illegal drugs) are not included within the scope of this standard. Petroleum products are included within the scope of this practice because they are of concern with respect to many parcels of commercial real estate and current custom and usage is to include an inquiry into the presence of petroleum products when doing an ESA of commercial real estate. This practice does not address requirements of any state or local laws or of any federal laws other than the appropriate inquiry provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)'s landowner liability protection. Users are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on the property that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance. The scope of this practice includes research and reporting requirements that support the user's ability to qualify for landowner liability protection. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report.

1.2 Detailed Scope of Services

This scope of services is site specific in that it relates to assessment of environmental conditions on a specific parcel of commercial real estate. The Phase I ESA will be performed by an environmental professional. An environmental professional (EP) is defined as a person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). The scope of services for this Phase I ESA is as follows:

Government Records Review: Standard environmental record sources, including Federal, Tribal, and State lists as well as local sources of environmental records were reviewed. We authorized Environmental Data Resources (EDR) to conduct a search of specified government databases and produce a map-based radius search report which would identify sites within the approximate minimum distances pursuant to the ASTM E1527-13 Standard.

Review of Historical Sources: Historical records that may have been reviewed include, but are not limited to, aerial photographs, fire insurance (Sanborn®) maps, building department records, chain-of-title documents, city directory abstracts, land use records, and USGS Topographic Maps. The AAI rule requires that historical documents be reviewed as far back in time as the property contained structures or the property was used for agricultural, residential, commercial, industrial, or governmental purposes. Under the AAI rule, historical sources of information must be reviewed as far back as 1940. The AAI rule does not specify a research interval for reviewing historical records.

Site Reconnaissance: A site reconnaissance visit was conducted on 30 October 2020 by Mr. Dennis S. Eck, dse@youngdahl.net.

Interviews: Prior to the site visit, the Client was asked to identify a person with good knowledge of the property (the key site manager). A Phase I ESA Questionnaire completed by the Owner's representative to facilitate the collection of information is provided in Appendix A. The AAI rule requires interviews be conducted with the current owner(s) and occupant(s) of the subject property. The AAI rule also requires that additional interviews be conducted with current and past facility managers, past owners, operators or occupants of the property, and past employees, as necessary to meet the objectives of the AAI rule. The AAI rule allows the environmental professional to determine whether such interviews are necessary.

Identify Data Gaps: If a data failure is encountered, the report shall document the failure and, if any of the standard historical sources were excluded, the environmental professional will give the reasons for their exclusion. If data failure represents a significant data gap, the report shall comment on the impact of the data gap on the ability of the environmental professional to identify recognized environmental conditions. If the data gaps are found, the environmental professional can and does not warrant nor guarantee that no significant events, releases, or conditions arose during the periods of such data gaps.

Evaluation and Report Preparation: The findings, opinions, and conclusions in the Phase I ESA report are supported by documentation. The report: (1) describes all services performed; (2) has a findings section which summarizes known or suspect environmental conditions associated with the property, and which may include recognized environmental conditions, historical recognized environmental conditions, and de minimis conditions; (3) includes Youngdahl Consulting Group Inc.'s opinion(s) of the impact on the property of the known or suspect environmental conditions identified in the findings section as well as the logic and reasoning used in evaluating information collected during the course of the investigation; and (4) includes a conclusions and recommendations section that summarizes the recognized environmental conditions connected with the property and presents recommendations to address those conditions. The report will include an analysis of the relationship of the purchase price of the subject property to the fair market value of the property, if it were not contaminated.

Report Shelf Life: Under the AAI rule, a prospective property owner may use a Phase I ESA Report without having to update any information collected as part of the inquiry: (1) if the all appropriate inquiries investigation was completed less than 180 days prior to the date of acquisition of the property or (2) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation and was completed less than 180 days prior to the date of acquisition of the property. A prospective property owner may use a previously conducted Phase I ESA Report: (1) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation for the same property; and (2) if the information was collected or updated within one year prior to the date of acquisition of the property; and (3) certain aspects of the previously conducted report are conducted or updated within 180 days prior to the date of acquisition of the property. These aspects include the interviews, on-site visual

inspection, the historical records review, the search for environmental liens, and the declaration by the environmental professional responsible for the assessment or update.

1.3 Significant Assumptions, Limitations, and Exceptions

This report and review of the subject property is limited in scope. All appropriate inquiry does not mean an exhaustive assessment of a clean property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of the ASTM 1527-13 practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an ESA and the reduction of uncertainty about unknown conditions resulting from additional information. The appropriate level of inquiry will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry. This type of investigation is undertaken with the risk that the presence, full nature, and extent of contamination would not be revealed by visual observation and review of available data alone. The findings presented in this report were based on field observations and review of available data. Therefore, the data obtained is clear and accurate only to the degree implied by the sources and methods used. The information presented herewith was based on professional interpretation and on the data obtained. A review of regional radon values was performed as part of this study. A general discussion of the potential for asbestos-containing building material or lead-based paint to be present on the subject property is also included as part of this study.

1.4 Special Terms and Conditions and/or Additional Services

A Phase I ESA meeting or exceeding the ASTM 1527-13 practice and completed less than 180 days prior to the date of acquisition (the date on which a person acquires title to the subject property) or the date of the intended transaction is presumed to be valid. If within this period the assessment will be used by a different user than the user for whom the assessment was originally prepared, the subsequent user must also satisfy the User's Responsibilities set forth in Section 1.5. Users and environmental professionals may use information in prior environmental site assessments provided such information was generated as a result of procedures that meet or exceed the requirements of ASTM 1527-13.

1.5 User Responsibilities

The user should provide reasonably ascertainable land title records and judicial records for review for the existence of environmental liens or activity and use limitations (AUL), if any, that are currently recorded against the property. AULs are an explicit recognition by a federal, tribal, state, or local regulatory agency that residual levels of hazardous substances or petroleum products may be present on a property, and that unrestricted use of the property may not be acceptable. If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional, and before the site reconnaissance is conducted.

In a transaction involving the purchase of a parcel of commercial real estate, the user shall consider the relationship of the purchase price of the property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products. The user should try to identify an explanation for a lower price which does not reasonably reflect fair market value if the property were not contaminated, and make a written record of such explanation. If the user is aware of any commonly known or reasonable ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to

communicate such information to the environmental professional before the site reconnaissance is conducted.

1.6 Reliance

This Phase I ESA has been prepared for and is intended for the use of KF Development and their consultants. This report is valid as of the date stated on the document; the report should not be relied upon for information concerning changes in the condition of the property after the report was prepared.

2.0 SITE INFORMATION

2.1 Site Description

The property description referred to herein is based on a Sacramento Assessor's Parcel Map and on a site reconnaissance performed by representatives of Youngdahl Consulting Group, Inc. (Youngdahl). These were also the basis for the "Vicinity Map" - Figure 1. The subject site is rectangular in shape, consists of approximately 6 acres of land, and is assigned Sacramento County Assessor's Parcel Numbers (APNs) 119-1110-009, -010, -013, & -014 in Elk Grove, CA.

2.2 Legal Description

This report presents the results of the Phase I Environmental Site Assessment (ESA) performed on Sacramento County APNs 119-1110-009, -010, -013, & -014.

2.3 Environmental Liens or Activity and Use Limitations

Mr. Michael Green of KF Development and Construction, Inc. (Owner's Representative) did not indicate any knowledge of environmental liens or activity and use limitations on the completed questionnaire (Appendix A).

2.4 Specialized Knowledge and Commonly Known or Reasonably Ascertainable Information

Mr. Green indicated specialized knowledge of the subject property on the completed questionnaire (Appendix A).

2.5 Valuation Reduction for Environmental Issues

Mr. Green marked "No" to the question regarding valuation reduction on the completed questionnaire (Appendix A).

2.6 Reasons for Performing the Phase I ESA

The user, KF Development, requested the completion of the Phase I ESA per ASTM E1527-13.

3.0 INTERVIEWS

3.1 Interviews with Past and Present Owners, Key Site Manager, and/or Occupant

Mr. Green was contacted regarding the subject property. He informed us that there have been no structures, tanks, or any other uses for this site and that the owner, Erich Kopple of KF Development and his father have owned the site for approximately 20 years.

4.1 Physical Setting Source(s)

Geologic maps and a current United States Geologic Society (USGS) 7.5 Minute Topographic Series Map of the Florin Quadrangle, as well as observations made during our site reconnaissance were used to make interpretations regarding the physical setting of the subject

property and the surrounding area. The elevation at the subject property is approximately 20 feet above mean sea level (MSL) and is located in Township 8 North, Range 7 East, Section 3, Mount Diablo Base & Meridian.

4.2 Regional Geology and Soil Description

The subject property is located in Sacramento, California, which is found within the Great Valley geomorphic province. This province is an approximately 50- by 400-mile alluvial plain that drains via the Sacramento and San Joaquin Rivers into the San Francisco Bay area. This valley is filled with sediments as thick as 20,000 to 40,000 feet and represents a fore-arc basin between the Sierra Nevada to the east and accretionary Coast Ranges to the west (Bartow and Nilsen, 1990).

According to the Preliminary Geologic Map of the Lodi 30' x 60' Quadrangle, California (Dawson, 2009), the subject property and vicinity are underlain by the middle member of the Pleistocene-age Riverbank Formation. This formation consists primarily of arkosic sediment (weathered gravel, sand, and silt) derived mainly from the interior of the Sierra Nevada and deposited between 0.13 Ma and 0.45 Ma (Marchand and Allwardt, 1981). The middle unit is associated with a broad alluvial surface consisting of westward-thickening sandy alluvium over eroded Turlock Lake Formation (Marchand & Allwardt, 1977).

According to the Second Quarter 2020 Groundwater Monitoring Report for the Shell-Branded Station – 9100 Harbour Point Drive located approximately 2,700 feet west-north west of the subject property, the groundwater elevation is between 13.41 and 16.88 feet below the ground surface (bgs). Groundwater flow direction based on groundwater elevations is towards the northeast.

The United States Department of Agriculture Natural Resources Conservation Service's Web Soil Survey was accessed on 28 October 2020. Soils present on the site include:

- **94.1% San Joaquin Silt Loam, 0 to 3 percent slopes (Map Unit Symbol 214)** Parent material is alluvium derived from granite, the unit is moderately well drained, has a high runoff class, and is farmland of statewide importance.
- **5.9% San Joaquin-Galt Complex, 0 to 3 percent slopes (Map Unit Symbol 218)** Parent material is alluvium derived from granite, the unit is moderately well drained, has a high runoff class, and is farmland of statewide importance.

The Department of Conservation Division of Oil, Gas, and Geothermal Resources' Well Finder was accessed and identified one well approximately 1,800 feet northwest of the subject property. This well has American Petroleum Institute (API) number 0406720044, is plugged, and was a dry hole.

4.3 Regional Radon Values

Elevated radon gas levels in indoor air are a result of radon moving into buildings from the soil, either by diffusion or flow due to air pressure differences. The ultimate source of radon gas in buildings is the uranium naturally present in rock, water, and soil. Some rock types are known to contain more uranium than others. In California, most uranium deposits are relatively small in aerial extent and are located in rural areas. Consequently, the chance of severe radon levels (>200 pCi/L) occurring in buildings in California should be very low. The following rock units in California contain uranium in concentrations above the crustal average: the Monterey Formation, asphaltic rocks, marine phosphatic rocks, granitic rocks, felsic volcanic rocks, and certain metamorphic rocks. According to EPA publication 402-R-93-025, entitled EPA's Map of Radon Zones, California, dated September 1993, Sacramento County is shown to be in Zone 3. Zone 3 has a predicted average radon screening level of less than 2 Pico Curies per Liter, this

is considered to be a low value of geologic radon potential.
The California Department of Health Services, California Indoor Radon Levels Sorted by Zip Code was last updated February 2016. The number of tests does not necessarily represent the number of houses tested. A single house may have had several tests conducted. The table contains both long-term and short-term indoor radon measurements. The California Department of Health Services recommends that you take action to reduce radon levels in your house if they are 4pCi/L or greater. Of the 25 tests conducted for Zip Code 95758, 3 were equal to or greater than 4pCi/L.

4.4 Asbestos Containing Building Materials
Asbestos is a set of six naturally occurring silicate minerals used commercially for their desirable physical properties. They all have in common their eponymous, asbestiform habit: long, thin fibrous crystals. The prolonged inhalation of asbestos fibers can cause serious illnesses including malignant lung cancer, mesothelioma, and asbestosis. Asbestos became increasingly popular among manufacturers and builders in the late 19th century because of its sound absorption, average tensile strength, its resistance to fire, heat, electrical and chemical damage, and affordability. It was used in such applications as electrical insulation for hotplate wiring and in building insulation. When asbestos is used for its resistance to fire or heat, the fibers are often mixed with cement (resulting in fiber cement) or woven into fabric or mats.

Most products manufactured today do not contain asbestos. In the industrialized world, asbestos was phased out of building products mostly in the 1970s with most of the remainder phased out by the 1980s. Asbestos containing building materials in residences includes a variety of products, such as: stipple used in textured walls and ceilings; drywall joint filler compound; asbestos contaminated vermiculite, vinyl floor tile; vinyl sheet flooring; window putty; mastic; cement board; furnace tape; and stucco. Asbestos was used a lot in roofing materials, mainly corrugated asbestos cement roof sheets and asbestos shingles. Other sources of asbestos containing materials include fireproofing and acoustic materials. On July 12, 1989, EPA issued a final rule banning most asbestos-containing products. In 1991, this regulation was overturned by the Fifth Circuit Court of Appeals in New Orleans. As a result of the Court's decision, the following specific asbestos-containing products remain banned: flooring felt, roll board, and corrugated commercial, or specialty paper. In addition, the regulation continues to ban the use of asbestos in products that have not historically contained asbestos, otherwise referred to as "new uses" of asbestos. For buildings constructed prior to 1980 (Code of Federal Regulations 29 CFR 1926.11) all thermal system insulation and surface materials must be designated as presumed asbestos-containing building materials (ACBM) unless proved otherwise through sampling. No structures were observed to be present on the subject site; therefore, it is our opinion that ACBM is not of concern.

4.6 Lead-based Paint
Lead is considered to be a harmful environmental pollutant. In late 1991, the Secretary of the Department of Health and Human Services called lead the "number one environmental threat to the health of children in the United States." Humans are exposed to lead through the air, drinking water, food, contaminated soil, deteriorating paint, and dust. Airborne lead enters the body by breathing or swallowing lead particles or dust once it has settled. Old lead-based paint is the most significant source of lead exposure in the U.S. Lead-based paint in the United States resulted in a court case against the Lead Industries Association. Due in great part to studies carried out by Philip J. Landrigan, paint containing more than 0.06% (by weight of dried product) lead was banned for residential use in the United States in 1978 by the U.S. Consumer Product Safety Commission (16 Code of Federal Regulations CFR 1303). Most homes and other buildings built before 1960 contain heavily leaded paint. Some homes built as recently as 1978 may also contain lead paint. No structures were ever present at the subject site; therefore, it is our opinion that it is unlikely that lead-based paint is present in site soils.

4.7 Termiticides

Termiticides - organochlorine termiticides (OC termiticides) are a group of persistent pesticides that were formerly used for termite control in and around wooden structures from the mid-1940s to the late 1980s. These OC termiticides used in the past include chlordane, aldrin, dieldrin, heptachlor, and DDT. Chlordane and other organochlorine pesticides (OCPs) were commonly used as termiticides around structures until 1988. Above-ground use of chlordane was phased out between 1978 and 1983 by the United States Environmental Protection Agency (USEPA); although chlordane was used as a termiticide for wooden structures until it was prohibited in 1988. In 2004, the California Department of Toxic Substances Control (DTSC) evaluated OCPs in soil for proposed school sites on residential properties; finding chlordane in 98 percent of the samples, DDT in 95 percent, dieldrin in 71 percent, and heptachlor in 17 percent. DTSC implemented an "Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers" in 2006. No structures were ever present at the subject site; therefore, it is our opinion that it is unlikely that termite pesticides are present in site soils.

4.8 Pesticides

Prior to 1950, the use of arsenical pesticides and herbicides as lead arsenate (LA) was the most extensively used of the arsenal insecticides. The search for substitutes for LA began when it was discovered in 1919 that contemporary practices for washing produce were failing to adequately remove As residues (Shepard, 1939). Unfortunately, all of the tested alternative materials were found to provide less effective insect control or were more toxic to plants and animals. No adequate substitutes were found until 1947, when the synthetic organic insecticide dichlorodiphenyltrichloroethane (DDT) was introduced. Lead arsenate use in Washington State, USA, effectively terminated in 1948, when DDT became widely available to the public (Benson et al., 1968). Veneman et al. (1983) stated that LA use ceased in Massachusetts, USA, in the early 1950s. All insecticidal uses of LA in the USA were officially banned on 1 August 1988 (USEPA, 1988), with a comment that all registrations for insecticidal use had lapsed before that date.

Organochlorine pesticides (OCPs) were commonly used in the United States between the 1940s and 1970s for public health vector control, agricultural crop production, and pest control around structures. Although most OCPs were banned or withdrawn from use in the 1970s (including DDT), the compounds remain in the environment where surface soils associated with historical agricultural and termite control pesticides are present (DTSC, 2010).

No significant agricultural use has been found at the subject property during our review of historical records.

5.0 HISTORICAL SOURCES REVIEW

All obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier. The term "developed use" includes agricultural uses and placement of fill dirt. Standard historical sources shall be reviewed at approximately five-year intervals. In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to provide the following standard historical sources: aerial photographs, USGS topographic maps, local city directories, and fire insurance maps (Sanborn Maps). Standard historical sources may also include: property tax files, recorded land title records, building department records, and zoning/land use records.

5.1 Aerial Photographic Review

Aerial photographs for the years 1937, 1957, 1964, 1966, 1972, 1984, 1993, 2006, 2009, 2012, and 2016 were provided in the EDR Aerial Photo Decade Package (Appendix B). Interpretations were made in an effort to evaluate former uses of the subject property and adjacent areas, and to determine if any significant topographic or cultural changes have occurred. All photographs were provided at a scale of 1" = 500'. A summary of the photographs reviewed is provided below.

Date	Source	Comments
1937	USDA	The subject property consists of vacant land that has been disced. A residence and outbuilding are observed on a small plot of land that had not been cleared to the west.
1957	USDA	No significant changes to the subject property are observed. The structures to the west have been cleared.
1964	USDA	Two areas within the subject property are discolored and are likely vernal pools. No other changes are observed.
1966-1984	USDA/USGS	No significant changes to the subject and adjacent properties are observed.
1993	USGS/DOQQ	There are paved roadways surrounding and bisecting the subject property. The south adjacent property has one structure and landscaping. Three large warehouse buildings are visible to the northwest.
2006	USDA/NAIP	An object, not likely a permanent structure, is visible on the west side of the site. All adjoining properties have been developed or are partially developed.
2009	USDA/NAIP	The western object is no longer visible. All adjoining properties have been developed.
2012-2016	USDA/NAIP	No significant changes to the subject and adjacent properties are visible.

5.2 Review of Historical and Current USGS Topographic Maps

A topographic map is a color-coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topographic maps show the shape, elevation, and development of the terrain in precise detail by using contour lines and color-coded symbols. The EDR Historical Topographic Map Report (Appendix B) provided maps dated 1894 to 2012. Interpretations were made in an effort to evaluate former uses of the subject property and adjacent areas, and determine if any significant topographic or cultural changes have occurred.

Date	Map Name	Series	Comments
1894	Lodi, CA	30 Minute	No features are shown within the subject property boundary. A roadway is shown to the east and intermittent streams to the north.
1909	Florin, CA	7.5 Minute	No significant changes to the subject property are shown. An unimproved road is shown to the west and one structure to the northwest. Roadways and railroad tracks are shown to the east.
1941	Franklin, CA	15 Minute	No significant changes to the subject and adjacent properties are shown.

Date	Map Name	Series	Comments
1947	Galt, CA	15 Minute	No significant changes to the subject and adjacent properties are shown.
1953	Florin, CA	7.5 Minute	No significant changes to the subject property are shown. The structure and roadway to the west are no longer shown.
1968	Florin, CA	7.5 Minute	No significant changes to the subject property are shown. Intermittent streams are shown to the east and south. Interstate 5 is shown to the west.
1975	Florin, CA	7.5 Minute	No significant changes to the subject property are shown.
1980	Florin, CA	7.5 Minute	No significant changes to the subject property are shown.
2012	Florin, CA	7.5 Minute	Only major roadways, topography, and water features are depicted in this map. Roadways surround the subject property with one roadway bisecting the site into east and west sections.

5.3 Historical City Directory Abstract Review

EDR provided the EDR-City Directory Image Report for review and a copy is provided in Appendix B. Building directories including city, cross reference and telephone directories were reviewed, if available, at approximately five-year intervals for the years spanning 1970 through 2017.

Laguna Main Street

2017

9097 LAKESIDE CLEANERS
9098 CLIFFORD J CHAN DDS
EDWARD JONES FINANCIAL ADVISOR JO
JOSEPH YOU DDS
LAGUNA WEST DENTAL CARE IN ELK GROVE
PETS TO GO
ROXANNE LEE OD

2014

9098 ABEL PET CLINIC
CHAN CLIFFORD J DDS
EDWARD JONES FINANCIAL ADVISOR MA
EPSTEIN, JEREMY R
KELLY BYAM DVM
LAGUNA WEST DENTAL CARE
LAKESIDE CLEANERS
LEE ROXANNE OD
LOUIE KINGMAN OD
PETS TO GO
UPSCALE REPTILES
YOU JOSEPH DDS

2010

9097 LAKESIDE CLEANERS
9098 ABEL PET CLINIC
BYAM, KELLY A

CALIFORNIA MINUTE CLINIC INC
COVINGTON DELORES
EDWARD JONES
EPSTEIN, JEREMY R
EXCLUSIVE REAL ESTATE SVC
GANDY, JANET
KINGMAN LOUIE & LEE OPTOMETRY
LAGUNA WEST DENTAL CARE
PETS TO GO
SPEED TERRI L DDS
STATE FARM INSURANCE
UPSCALE REPTILES

2006

9097 LAKESIDE CLEANERS
9098 ABEL PET CLINIC
CHAN CLIFFORD J DDS
EDWARD JONES – INVESTMTS
GANDY CHRIS
GOLDEN OTASHE DR
KELLY BYAN DVM
LAGUNA WEST DENTAL CARE
LAGUNA WEST MEDICAL GROUP
LOUIE KINGMAN J DR
PETS TO GO
SPEED TERRI L DDS
UPSCALE REPTILES
YOU JOSEPH DDS

2001

9097 LAKESIDE CLEANERS
9098 ABEL PET HOSPITAL
CHAN CLIFFORD J DDS
GANDY CHRIS
LAGUNA WEST DENTAL CARE
LOUIE JONGMAN OD
MEMORIES ARE MADE
PETS TO GO
SPEED TERRI L DDS
STATE FARM INS CO
YOU JOSEPH DDS

Vaux Ave

2001-2017

3001 STEVEN SCOTT DDSMS

5.4 Certified Sanborn Map Report

No Sanborn Map coverage was identified for the subject property.

6.0 REGULATORY RECORDS REVIEW

The records review consisted of a review of reasonably ascertainable environmental record sources, physical setting sources, and historical use information that will help identify recognized environmental conditions in connection with the property. Reasonably ascertainable record information must be publicly available, obtainable from its source within reasonable time and cost constraints, and be practically reviewable.

6.1 Commercial Database Search Review

In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to identify sites listed on regulatory agency databases within approximate minimum search distances from the subject property with potential of existing environmental problems. The term "approximate minimum search distances" means the distances within the area which government records must be reviewed pursuant to ASTM Phase I Standards. The term "minimum search distance" is used in lieu of radius as to include irregularly shaped properties. A current EDR Radius Map with GeoCheck® (EDR Report) was provided by EDR on 27 October 2020 (Appendix C). Included in the report are the dates the original government sources were updated and the dates the sources were last updated by EDR, as well as a list of acronyms used by EDR.

The EDR Radius Map with GeoCheck® (EDR Report) identified several addresses within minimum search distances that are listed in multiple databases:

- **Lakeside Cleaners**; 9097/9098 Laguna Main Street, Suite #2; <0.1 mile north. Listed in the following databases:
  - EDR Hist Cleaner
  - HWTS
  - DRYCLEANERS
  - Sacramento Co. ML
  - CERS
  - RCRA NONGEN/NLR
- **Abel Pet Clinic, Inc.**; 9098 Laguna Main Street, Suite #1; <0.1 mile north. Listed in the RCRA NONGEN/NLR and Sacramento Co. ML databases.
- **Terri L Speed DDS**; 9098 Laguna Main Street, Suite #4; <0.1 mile north. Listed in the Sacramento Co. ML database.
- **Francis M Joven D.M.D.**; 9098 Laguna Main Street, Suite #6; <0.1 mile north. Listed in the RCRA NONGEN/NLR database.
- **Laguna West Dental Care**; 9098 Laguna Main Street, Suite #8; <0.1 mile north. Listed in the Sacramento Co. ML database.
- **Apple, Inc.**; 2911 Laguna Blvd Blgs A-C/1-3; 0.147 mi NNW/NW. Listed in the AST, RCRA-LQG, FINDS, ECHO, WDS, Sacramento Co. ML, and RCRA-SQG databases.

According to the EDR Report, a section of the northeast half of the subject property is designated as a wetland, per the National Wetlands Inventory (1994).

Due to poor or inadequate information, EDR is unable to map certain sites. These sites are referred to by EDR as Orphans.

City	EDR ID	Site Name	Address	Database(s)
Elk Grove	S121649635	LAGUNA WEST RETAIL SHOPS	Laguna Blvd and Laguna Main Street	CIWQS
Sacramento	S121649636	LAGUNA WEST RETAIL SHOPS	Laguna Blvd and Laguna Main Street	CIWQS

These Orphan sites are the stormwater permits applied during construction of the business park to the north of the subject property.

6.2 Review of State and/or Local Government Records

The Sacramento County NextRequest system was utilized to request any records pertaining to hazardous materials at the subject site, the Apple, Inc. site at 2511 Laguna Blvd, and at the Lakeside Cleaners site at 9097/9098 Laguna Main Street Suite #2. No records were produced for the subject property.

Lakeside Cleaners/Martinizing Dry Cleaning, 9098/9097 Laguna Main Street Suite 2
This site is within 130 feet from the subject property and is currently Martinizing Dry Cleaning. Facility inspection records provided by Sacramento County report DF 2000, hydrocarbon solvent, tetrachloroethylene (PCE), and petroleum distillate as being used on site. PCE was reported as being on site as recently as 2012 and in quantities between 15 to 30 gallons. Recent records show that the site now uses DF-2000, a petroleum hydrocarbon that contains naphthalene. A map depicting sewer utilities around this address at Laguna Main Street, Vaux Avenue, and Laguna Blvd was requested from the Sacramento Area Sewer District. A Master Plan Geographic Information Systems (GIS) map shows 8-inch vitrified clay pipe flowing east along Vaux Avenue north of the subject property. Effluent from the building that the dry cleaning business is located at is tied to this pipe.

Apple, Inc., 2911 Laguna Blvd Bldg A-C/1-3
The Apple distribution center is a permitted underground storage tank (UST) site and also has reportable quantities of hazardous materials on site. Hazardous materials inventory forms show that diesel fuel in above-ground and underground storage tanks are present in quantities up to 2,400 gallons. Also, sulfuric acid, lead acid batteries, and small quantities of miscellaneous chemicals and E-waste are reported. No significant violations or releases were discovered during our records review.

The State of California Water Resources Control Board's GeoTracker database was researched to identify if sites with groundwater contamination exist within the minimum search distances to the subject property (www.geotracker.swrcb.ca.gov). Also, the Department of Toxic Substance Control's (DTSC) Envirostor database was researched for sites of environmental concern near or at the subject property (https://www.envirostor.dtsc.ca.gov/public/). The subject property was not identified on the GeoTracker or Envirostor web sites.

The following addresses have permitted underground storage tanks (USTs) present:
Apple, Inc. (2511 Laguna Blvd Bldg 4)
Laguna 76 (2323 Laguna Blvd)
Harbour Point Shell #24 (9100 Harbour Point Drive)
7-Eleven Inc. #41229 (9146 Harbour Point Drive)

Shell Service Station, 9100 Harbour Point Drive
Environmental subsurface investigations began at this site in 2006 to support the potential sale of the site. Soil samples in the area of the fuel islands and USTs were found to have notable concentrations of gasoline, methyl tert butyl ether (MTBE), and tert butyl alcohol (TBA). Groundwater monitoring began in 2007 and is currently ongoing. According to the most recent groundwater monitoring report (second quarter 2020) MTBE remains the primary constituent of concern with some elevated gasoline in the core area of the offsite plume. Groundwater flow direction is towards the northeast, and the core of the plume is located northeast of the source area. The subject property is over 2,500 feet from the core area of the groundwater plume and is cross-gradient from this site; therefore, it is our opinion that the contaminant plume is unlikely to affect groundwater beneath the subject property.

6.3 Vapor Encroachment Screening

Vapor intrusion is the term used to describe the migration of volatile organic compounds (VOCs) via soil vapor from the sub-surface soil and/or groundwater upward into buildings, potentially causing unacceptable chemical exposure for building occupants. The vapor intrusion pathway is evaluated using the Conceptual Site Model (CSM) and vapor intrusion pathway screening. Volatilization of petroleum products in the subsurface occurs via the volatilization of constituents that are in the dissolved phase (in pore water or groundwater), volatilization from light

nonaqueous phase liquid (LNAPL) (either mobile or residual) directly, and volatilization from impacted soil. Once the individual constituents are in the vapor phase, they can continue to migrate in the vadose zone (soil zone between first groundwater and ground surface). Transport will occur through diffusion caused by concentration gradients. The greatest movement will take place in the most permeable materials. If the soil-moisture content in the vadose zone is high, then relatively soluble compounds such as ethanol and MTBE will tend not to stay in the vapor phase, but rather will stay in the soil moisture.

Soil vapor is one of the pathways of contamination to the subject property, along with ground water and soil. ASTM E1527-13 requires that vapor migration be treated no differently than contaminated groundwater. The soil vapor contaminant pathway needs to be considered in evaluation of RECs or other environmental concerns. The ASTM Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions (ASTM E2600-10) is the industry-accepted guidance for using Phase I ESA information to determine if a vapor encroachment condition (VEC) exists at the subject property. EDR's Vapor Encroachment Worksheet was designed to assist parties seeking to meet the search requirements of the ASTM E 2600-10. The dry cleaning business at 9098/9097 Laguna Main Street, Suite 2 was discovered as a potential risk during completion of the EDR VES. A copy of the EDR VES is provided in Appendix D.

7.0 SITE RECONNAISSANCE

7.1 Purpose

A reconnaissance of the subject property and a windshield survey of the surrounding area were conducted by Youngdahl Consulting Group, Inc. on 30 October 2020. Views of the subject property at the time of the reconnaissance visit are presented as Figures 3 - 8.

7.2 Subject Property

The subject property consists of vacant, disced land that is bisected by the north-south trending Laguna Main Street through the center of the site (Figs. 3 - 5). Utilities were observed to run around the periphery of the site and polyvinyl chloride (PVC) stub-outs and transformer boxes were observed (Fig. 6). A bus stop along Vaux Avenue was observed in the northeast portion of the site (Fig. 7, Photo 8). Commercial business parks are present in the north adjacent properties (Fig. 7, Photo 9), and a dry-cleaning business was observed to be on the west side of the business park approximately 130 feet from the subject property (Fig. 8, Photo 10). Underground utilities were observed to be beneath Vaux Avenue, which separates the north-adjacent commercial business park and the subject property (Fig. 8, Photo 11).

Reconnaissance Item	Observed	Reconnaissance Observations (30 October 2020)
Structures	Yes	Bus stop in the northeast portion of the site.
Liquid Storage Systems (UST/AST)	No	None observed.
Drums	No	None observed.
Other Containers	No	None observed.
PCBs	No	Transformers were in good condition with no leaks and on a concrete pad.

Reconnaissance Item	Observed	Reconnaissance Observations (30 October 2020)
Pits/Ponds/Ditches/Caves/Streams/ Lagoons	No	None observed.
Stained Soil/Pavement	No	None observed.
Stressed Vegetation	No	Recently disced terrain.
Solid Waste (Mounds or depressions)	No	None observed.
Waste Water (Discharge into drain/ditch/injection system/stream/adjacent property)	No	None observed.
Wells (Dry/irrigation/injection/abandoned)	No	None observed.
Other underground systems	Yes	Underground utilities and stub-outs.
Septic Systems	No	None observed.

7.3 Adjacent Properties

North: Vaux Avenue and a commercial business park.
East: Peets Street and apartment buildings.
South: Renwick Avenue, Laguna Town Hall, Town Square Park, and Laguna Kindercare.
West: Nolan Street and apartment buildings.

8.0 CONCLUSIONS, OPINION, AND RECOMMENDATIONS

This Phase I Environmental Site Assessment (ESA) was performed for the proposed Laguna Apartments project within Sacramento County Assessor's Parcel Numbers (APN) 119-110-009, -010, -013, & -014 in Elk Grove, California. This Phase I ESA was conducted for KF Development. Our study consisted of a review of environmental record sources, physical setting sources, review of site related documents, historical use information, and a site reconnaissance. We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitation of ASTM Standard Practice E 1527-13. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report.

8.1 Summary of Historical Subject Property Use Information

Date	Source	Subject Property Observations
1894-2016	Topographic Maps and Aerial Photos	The property is primarily vacant land. A roadway that bisects the site was built sometime between 1984 and 1993.

8.2 Recognized Environmental Conditions (RECs)

Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a

release to the environment; or (3) under conditions that post a material threat of a future release to the environment."

The Martinizing Dry Cleaning business was observed to be within approximately 130 feet from the subject property boundary. The EDR Report indicates that this location had been a dry cleaning business since as early as 1998. Records provided by Sacramento County indicate that the location has used perchloroethylene and petroleum distillates during dry cleaning activities as recently as 2012. They currently use DF-2000, which contains naphthalene. Generally, dry cleaning businesses are known for dumping water with small amounts of chemicals still present down the drain over long periods of time. Once these chemicals are in the sewer system, which runs beneath Vaux Ave along the north property boundary, they are able to contaminate surrounding soils and possibly groundwater if the sewer leaks. Contaminants can volatilize into soil vapor, creating a potential vapor intrusion risk at the subject property.

Based on the above, the following RECs were identified in connection with the subject property:

- Due to proximity to the dry cleaning business, there is a soil vapor intrusion risk at the subject property.

8.3 Historic Recognized Environmental Conditions (HRECs)

Historic recognized environmental conditions (HRECs) is a term used to state that the property only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions. **This assessment did not identify any HRECs in connection with the subject property.**

8.4 Controlled Recognized Environmental Conditions (CRECs)

The new term controlled REC (CREC) describes closed RECs that are managed under an activity and use limitation (AUL). **This assessment did not identify any CRECs in connection with the subject property.**

8.5 De Minimis Conditions (DMCs)

De minimis conditions (DMCs) are those situations that do not present a material risk of harm to public health or the environment and generally would not be subject to enforcement action if brought to the attention of the regulating authority. **This assessment did not identify any DMCs in connection with the subject property.**

8.6 Recommendations

It is the opinion of the Youngdahl Consulting Group Inc. that a soil vapor intrusion risk be evaluated by collecting soil gas samples along the subject property boundary adjacent to Vaux Avenue, nearest to the dry cleaner location, and be analyzed for dry cleaning solvents and petroleum distillates.

8.7 Data Gaps

According to § 3.3.20 of ASTM Standard E 1527-13 a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather same. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. It is our opinion that no significant data gaps were identified.

9.0 SELECTED REFERENCES

1. Bartow, Alan J. & Nilsen, Tor H., Review of the Great Valley Sequence, Eastern Diablo Range and Northern San Joaquin Valley, Central California, U.S. Geological Survey, open-File Report 90-226.

2. Benson, N.R., R.D. Bartram, C.D. Moodie, W.A. Starr, E. Blodgett, D.R. Heinicke, H.M. Reisenauer, and F.G. Viets. 1969. Re-establishing apples orchards in the Chelan-Manson area. Report to the U.S. Bureau of Reclamation, Denver, CO, USA.

3. California Department of Conservation - Division of Oil, Gas, and Geothermal Resources Well Finder. (https://maps.conservation.ca.gov/doggr/wellfinder/#close).

4. California Department of Water Resources (DWR) – Water Data Library, Groundwater Level Data (1953-2018).

5. Churchill, Ronald, Geologic Controls on the Distribution of Radon in California for the Department of Health Services, 25 January 1991, revised February 2016.

6. Custom Soil Resource Report, Sacramento County, California, National Resource Conservation Service Web Soil Survey.

7. Dawson, Timothy E., Preliminary Geologic Map of the Lodi 30’ x 60’ Quadrangle, California, California Geological Survey, 2009.

8. Marchand, Denis E., and Allwardt, Alan. Late Cenozoic Stratigraphic Units, Northeastern San Joaquin Valley, California. No. 77-748. US Geological Survey, 1977.

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11. United States Geologic Society (USGS) 7.5 Minute Topographic Series Map of the Florin Quadrangle, 2018.

12. Veneman, P.L.M., J.R. Murray, and J.H. Baker. 1983. J. Environ. Qual. 12:101-104 Printing Office, Washington, D.C., USA.

10.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

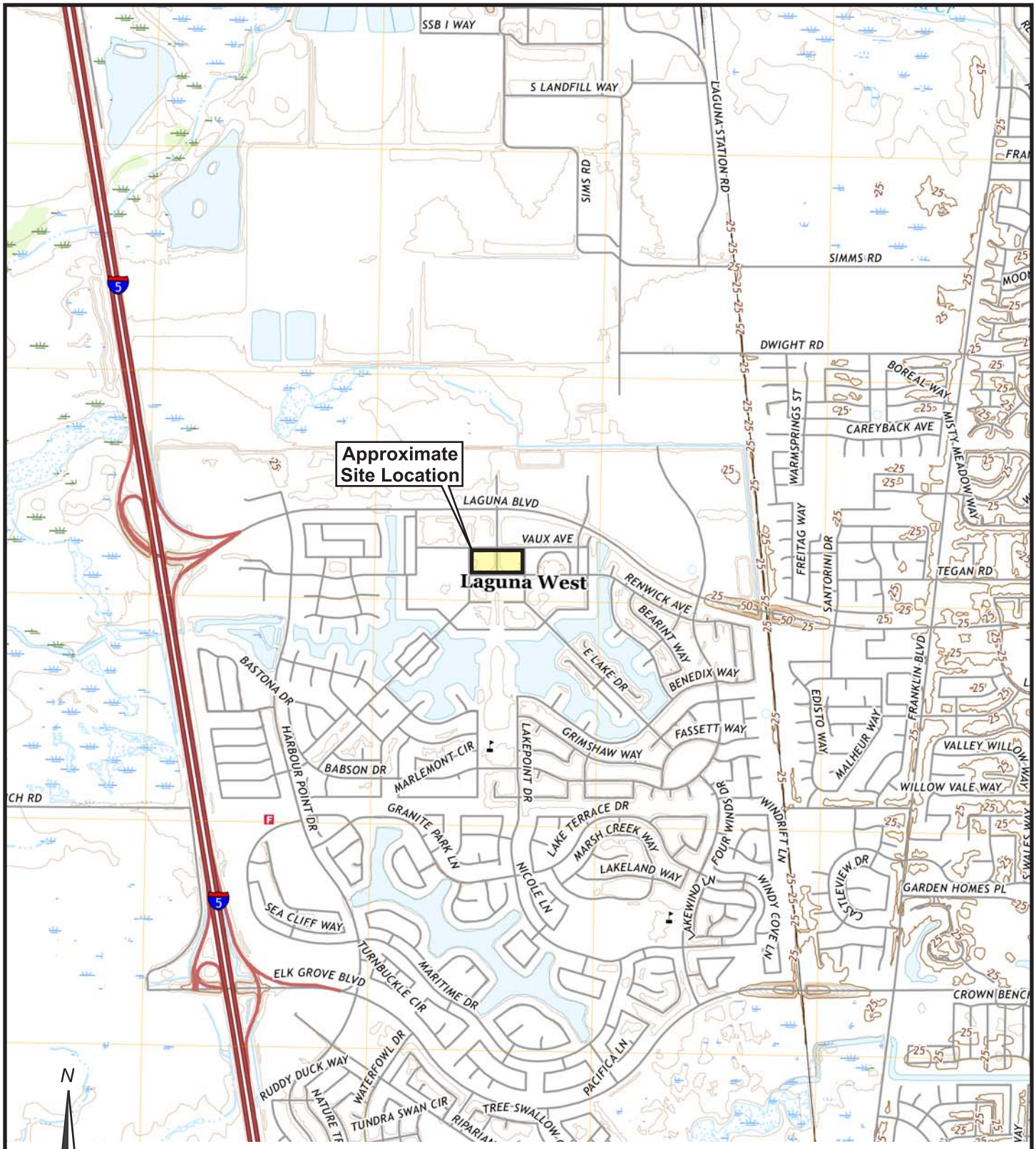
David C. Sederquist, C.E.G., C. HG.
Professional Geologist - California No. 4715; Certified Engineering Geologist, California No. 2133; Certified Hydrogeologist; California No. 619
Bachelor of Arts in Geology; California State University, Sacramento, 1980

Mr. Sederquist has performed Phase I and Phase II Environmental Site Assessments for commercial, residential, public utility and school projects since 1990. He has assessed, monitored, and closed soil and groundwater contamination sites. He is experienced in working closely with both regulatory officials and property owners/purchasers.

Dennis S. Eck, P.G.
Professional Geologist – California No. 9732
Master of Science in Geology; California State University, Fresno, 2014
Bachelor of Science in Geology; California State University, Chico, 2011

Since 2015, Mr. Eck has completed a number of Phase I and Phase II Environmental Site assessments. He has overseen and conducted work for a variety of projects from the initial discovery of contamination, through characterization and monitoring, and to site closure. Mr. Eck became a Professional Geologist in 2019.

FIGURES



Scale: 1:24,000

BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Florin Quadrangle, Dated 2018*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E17420.002	**VICINITY MAP** **Laguna Apartments Phase I ESA** Elk Grove, California	**FIGURE 1**
	November 2020		

REFERENCE: *Google Earth, Aerial Data Dated 5/10/2018*

0 30 60 120

Approximate Scale: 1" = 60'

YOUNGDAHL CONSULTING GROUP, INC.
ESTABLISHED 1984

Project No.: E17420.002

November 2020

SITE PLAN

Laguna Apartments Phase I ESA
Elk Grove, California

FIGURE 2

Photo 1: *View of the subject property from the northwest corner. Transformer boxes on a concrete pad were observed.*

Photo 2: *View of the subject property from the southwest corner.*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E17420.002 **November 2020**	**SITE PHOTOGRAPHS** **Laguna Apartments Phase I ESA** Elk Grove, California	**FIGURE** **3**

Photo 3: *View of the subject property from the southeast corner.*

Photo 4: *View of the subject property from the northeast corner.*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E17420.002 **November 2020**	**SITE PHOTOGRAPHS** **Laguna Apartments Phase I ESA** Elk Grove, California	**FIGURE** **4**

Photo 5: *Laguna Main Street, trending north-south, bisects the subject property.*

Photo 6 & 7: *Underground utilities and stub outs around the periphery of the site.*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E17420.002 **November 2020**	**SITE PHOTOGRAPHS** **Laguna Apartments Phase I ESA** Elk Grove, California	FIGURE **6**

Photo 8: *Bus stop near the northeast portion of the subject property.*

Photo 9: *View of the continuation of Laguna Main Street and commercial business parks in the north adjacent properties.*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E17420.002 November 2020	**SITE PHOTOGRAPHS** **Laguna Apartments Phase I ESA** Elk Grove, California	FIGURE 7

Photo 10: *Martinizing Dry Cleaners is in the north adjacent property near the northwest section of the subject site.*

Photo 11: *Various utilities within Vaux Avenue which runs along the north property boundary.*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E17420.002 **November 2020**	**SITE PHOTOGRAPHS** **Laguna Apartments Phase I ESA** Elk Grove, California	**FIGURE** **8**

APPENDICES

APPENDIX A
Phase I ESA Questionnaire

YOUNGDAHL CONSULTING GROUP, INC.
ESTABLISHED 1984
1234 Glenhaven Court, El Dorado Hills, CA 95762
4300 Anthony Court, Unit D, Rocklin, CA 95677
ph 916.933.0633 fx 916.933.6482
www.youngdahl.net

Project: **Site Name:** **Laguna Apartments Phase I ESA**
Location: **Laguna Main St. & Vaux Ave., Elk Grove, CA 95758**
Sacramento County APNs 119-110-009, -010, -013, & -014

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to Dennis Eck at dse@youngdahl.net or David Sederquist at dcs@youngdahl.net

1.	Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use?	Yes	MAG No	Unknown
2.	Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes	MAG No	Unknown
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*?	Yes	MAG No	Unknown
4.	Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property?	Yes	MAG No	Unknown
5.	Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin?	Yes	MAG No	Unknown

6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*?	Yes	No	Unknown
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unknown
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	No	Unknown
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	No	Unknown
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	No	Unknown
12.	Are you aware of any floor drains or sumps on the property?	Yes	No	Unknown
13.	Have any *hazardous substances* or *petroleum products,* unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes	No	Unknown
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	No	Unknown

15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	MG No	Unknown
16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	MG No	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*?	Yes	MG No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	MG No	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	MG No	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT): Michael Green **(SIGNATURE):** [signature]

TITLE: Director **ADDRESS:** 9105 Laguna Main Street Elk Grove, CA 95758

FIRM: KF Development and Construction, Inc. **DATE:** 10/26/20

PHONE NUMBER: 916-417-6370 **FAX NUMBER:**

RELATIONSHIP TO SITE: Owner _____ **or Owner's Representative** X

APPENDIX B
EDR Aerial Photo Decade Package
EDR Historical Topographic Map Report
EDR–City Directory Abstract
Certified Sanborn® Map Report (No Coverage)

Laguna Apartments

3000 Vaux Ave

Elk Grove, CA 95758

Inquiry Number: 6242735.8

October 27, 2020

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

10/27/20

Site Name:

Laguna Apartments
3000 Vaux Ave
Elk Grove, CA 95758
EDR Inquiry # 6242735.8

Client Name:

Youngdahl Consulting Group
1234 Glenhaven Court
El Dorado Hills, CA 95762
Contact: Dennis Eck

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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
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1993	1"=500'	Acquisition Date: June 15, 1993	USGS/DOQQ
1984	1"=500'	Flight Date: June 08, 1984	USDA
1972	1"=500'	Flight Date: June 28, 1972	USDA
1966	1"=500'	Flight Date: August 05, 1966	USGS
1964	1"=500'	Flight Date: May 19, 1964	USDA
1957	1"=500'	Flight Date: September 09, 1957	USDA
1937	1"=500'	Flight Date: August 18, 1937	USDA

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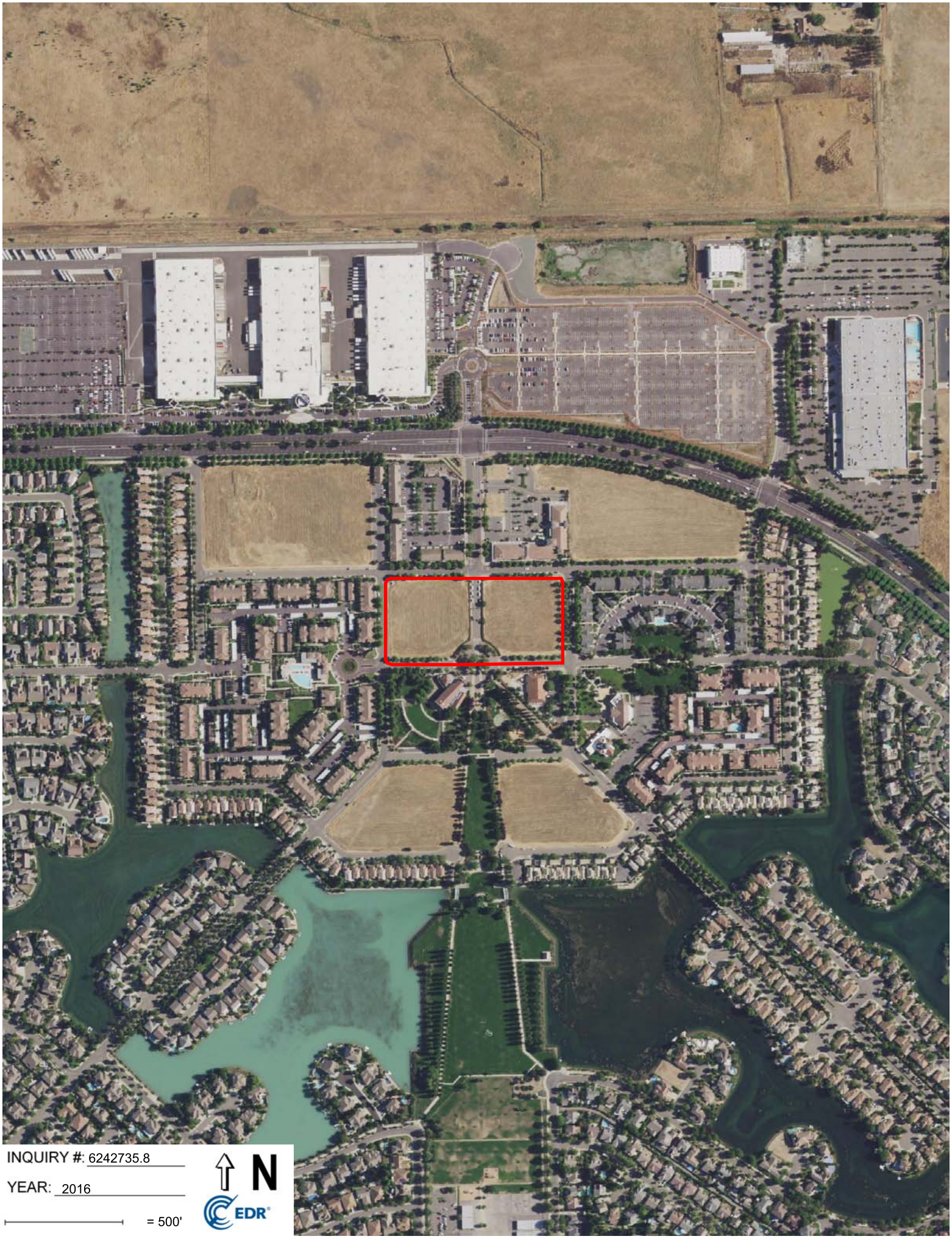
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EDR

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YEAR: 2012
= 500'
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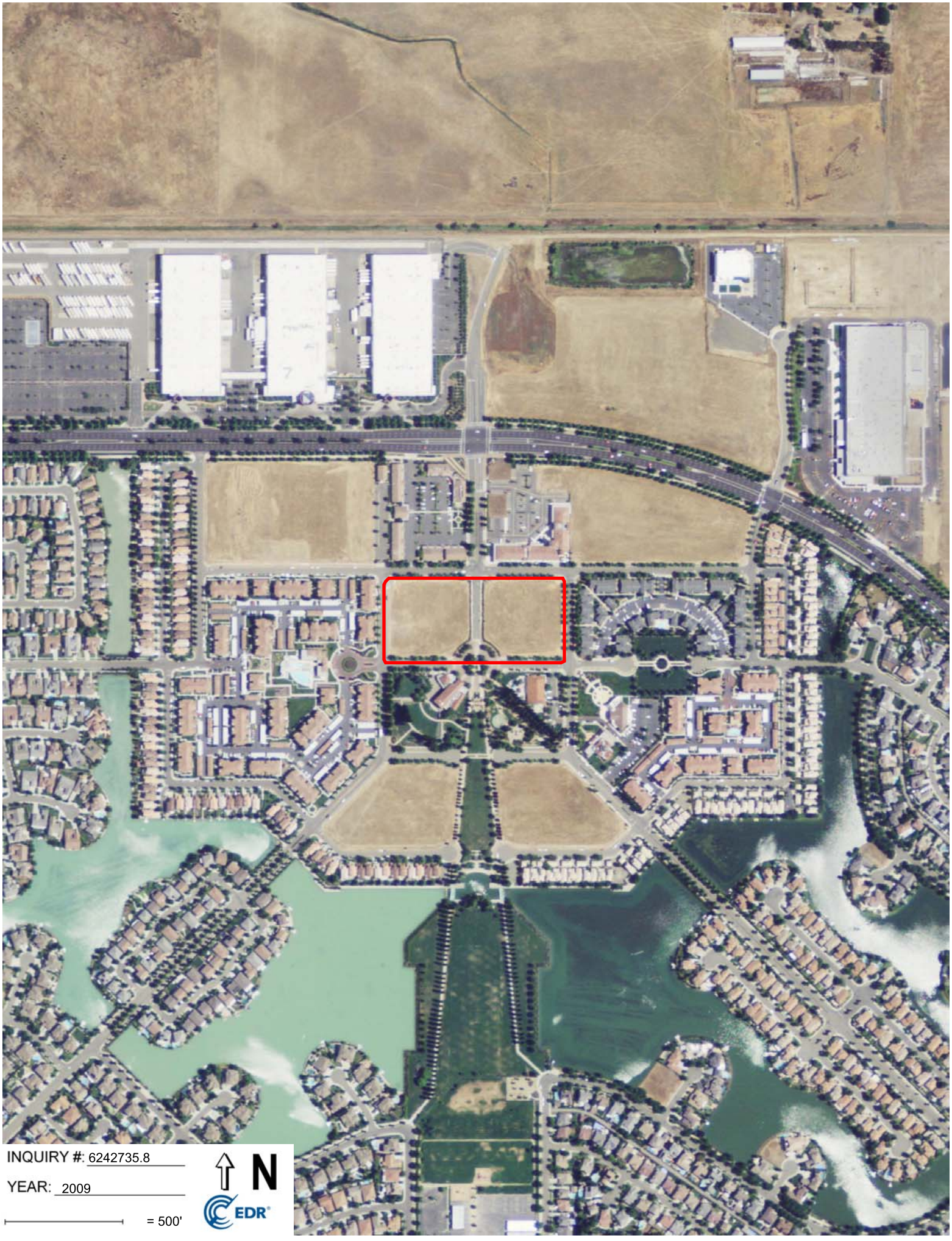
EDR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EDR

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YEAR: 1993

= 500'

N

EDR

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YEAR: 1984

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EDR

INQUIRY #: 6242735.8

YEAR: 1972

= 500'

N

EDR

INQUIRY #: 6242735.8
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= 500'
N
EDR

INQUIRY #: 6242735.8

YEAR: 1964

= 500'

N

EDR

INQUIRY #: 6242735.8

YEAR: 1957

= 500'

N

EDR

INQUIRY #: 6242735.8

YEAR: 1937

= 500'

N

EDR

Laguna Apartments
3000 Vaux Ave
Elk Grove, CA 95758

Inquiry Number: 6242735.4
October 27, 2020

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

10/27/20

Site Name:	Client Name:
Laguna Apartments	Youngdahl Consulting Group
3000 Vaux Ave	1234 Glenhaven Court
Elk Grove, CA 95758	El Dorado Hills, CA 95762
EDR Inquiry # 6242735.4	Contact: Dennis Eck

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Youngdahl Consulting Group were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	P20-545	**Latitude:**	38.425891 38° 25' 33" North
Project:	Laguna Apartments	**Longitude:**	-121.470123 -121° 28' 12" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	633542.24
		UTM Y Meters:	4254178.44
		Elevation:	17.00' above sea level

Maps Provided:

2012	1894
1980	
1975	
1968	
1953	
1947	
1941	
1909	

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Topo Sheet Key

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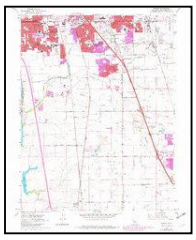
2012 Source Sheets

Florin
2012
7.5-minute, 24000

1980 Source Sheets



Florin
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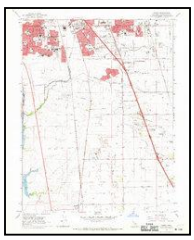
7.5-minute, 24000
Aerial Photo Revised 1978

1975 Source Sheets

Florin
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1968 Source Sheets



Florin
1968
7.5-minute, 24000
Aerial Photo Revised 1966

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets

Florin
1953
7.5-minute, 24000
Aerial Photo Revised 1949

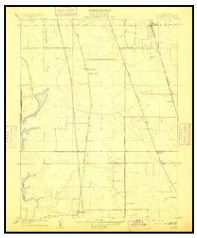
1947 Source Sheets

GALT
1947
15-minute, 50000

1941 Source Sheets

Franklin
1941
15-minute, 62500
Aerial Photo Revised 1939

1909 Source Sheets



Florin
1909
7.5-minute, 31680

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1894 Source Sheets

Lodi
1894
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Historical Topo Map

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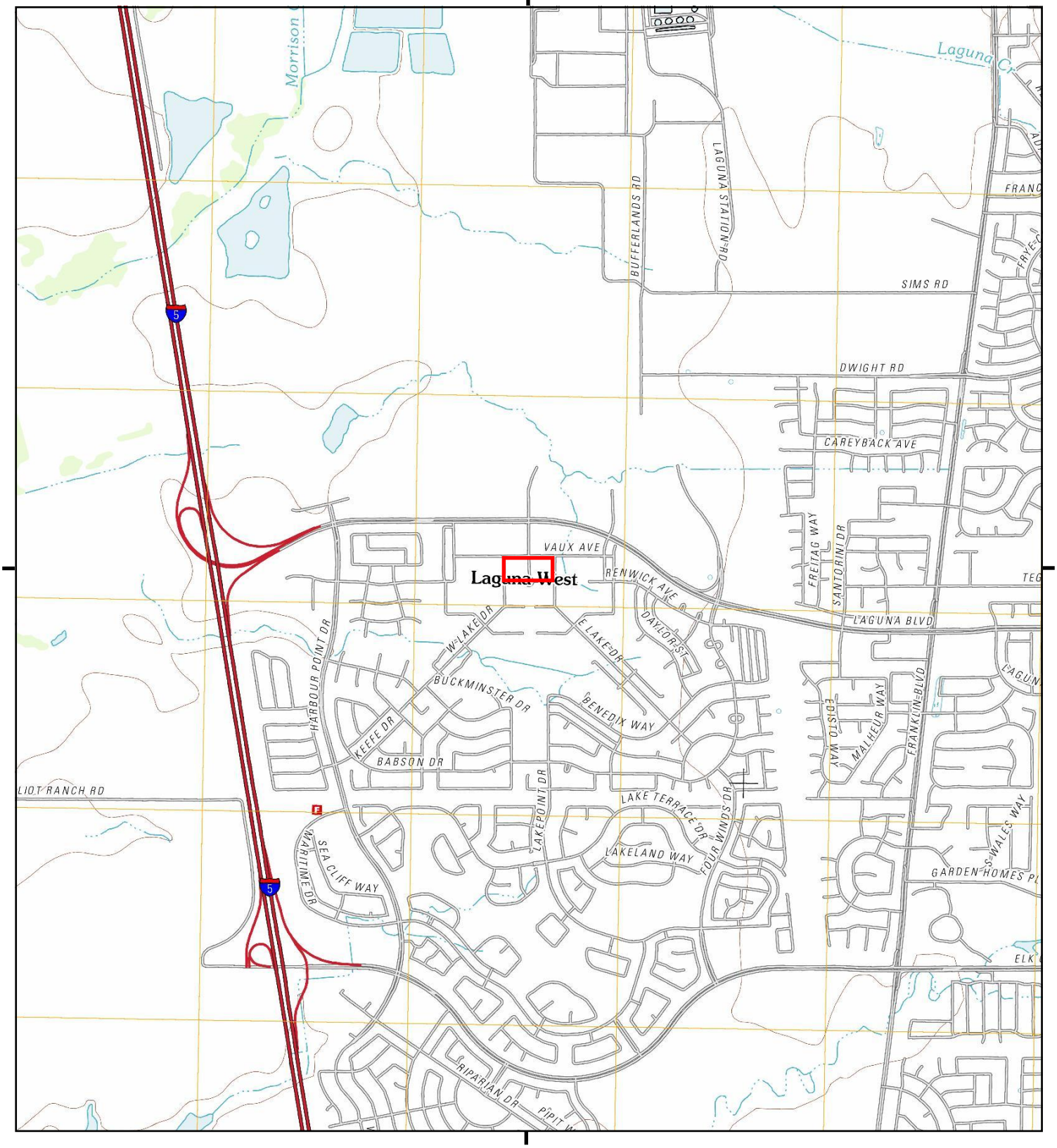


This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

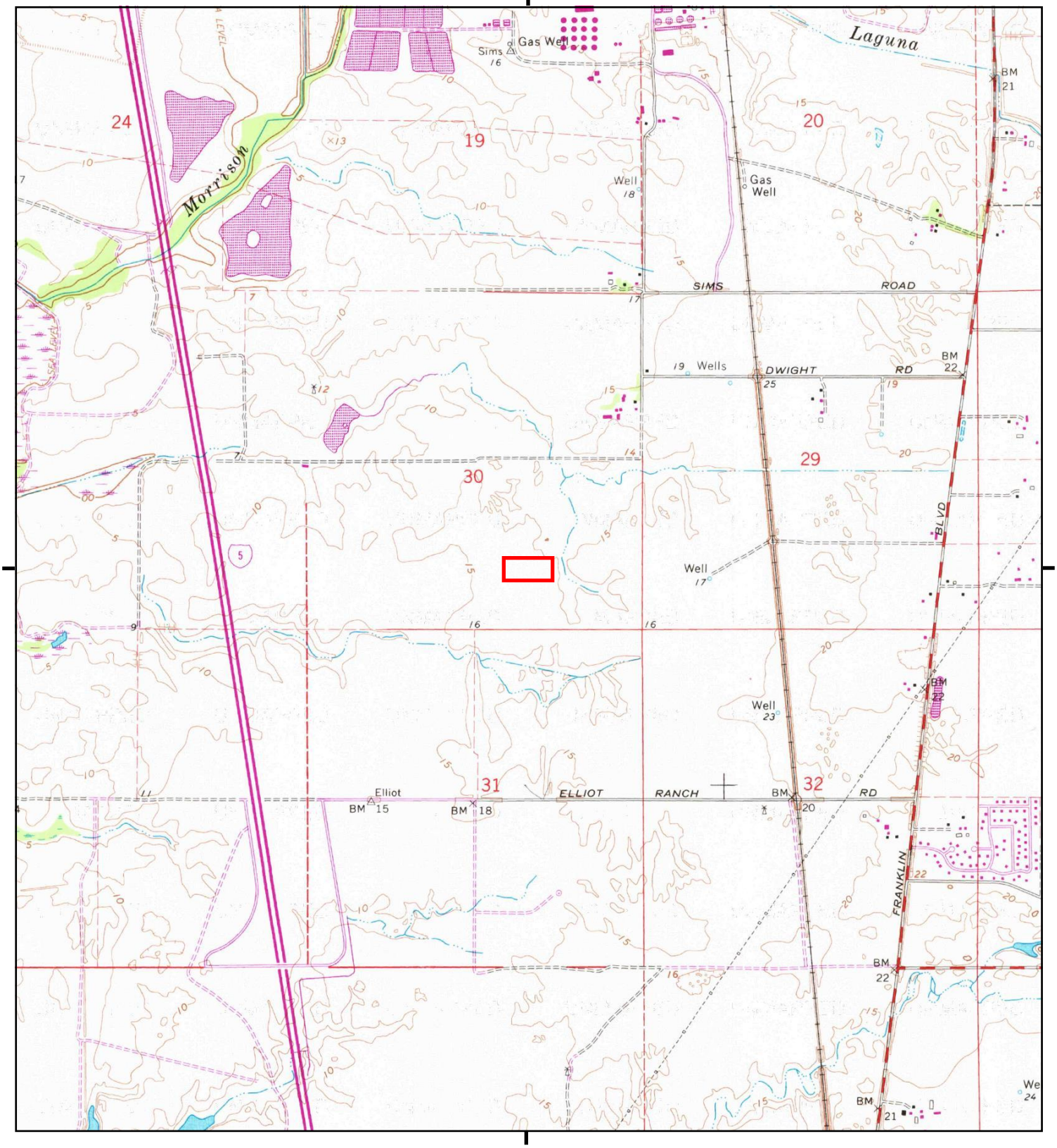
TP, Florin, 2012, 7.5-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

1980



This report includes information from the following map sheet(s).

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W E
SW S SE

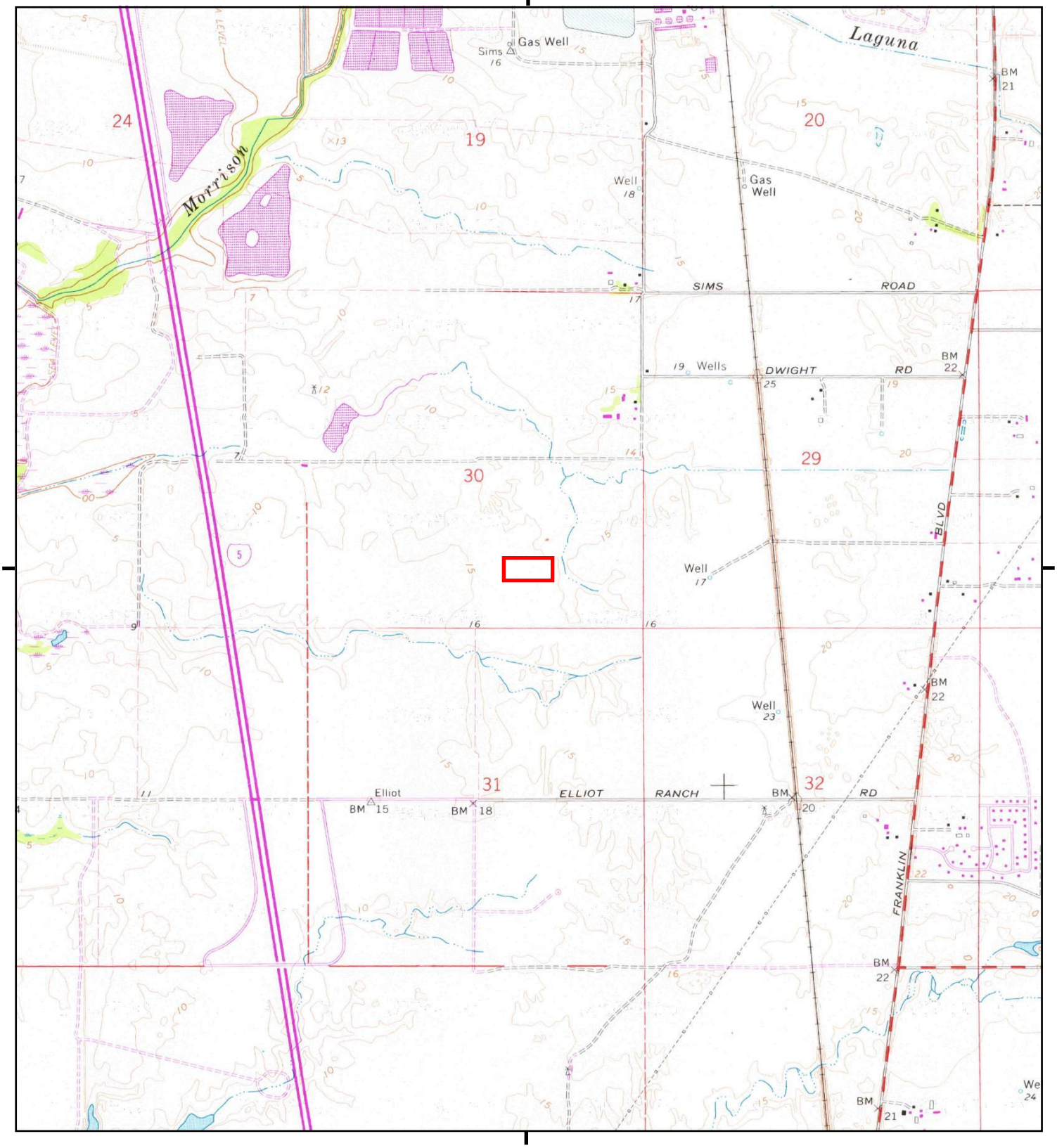
TP, Florin, 1980, 7.5-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

1975



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W E
SW S SE

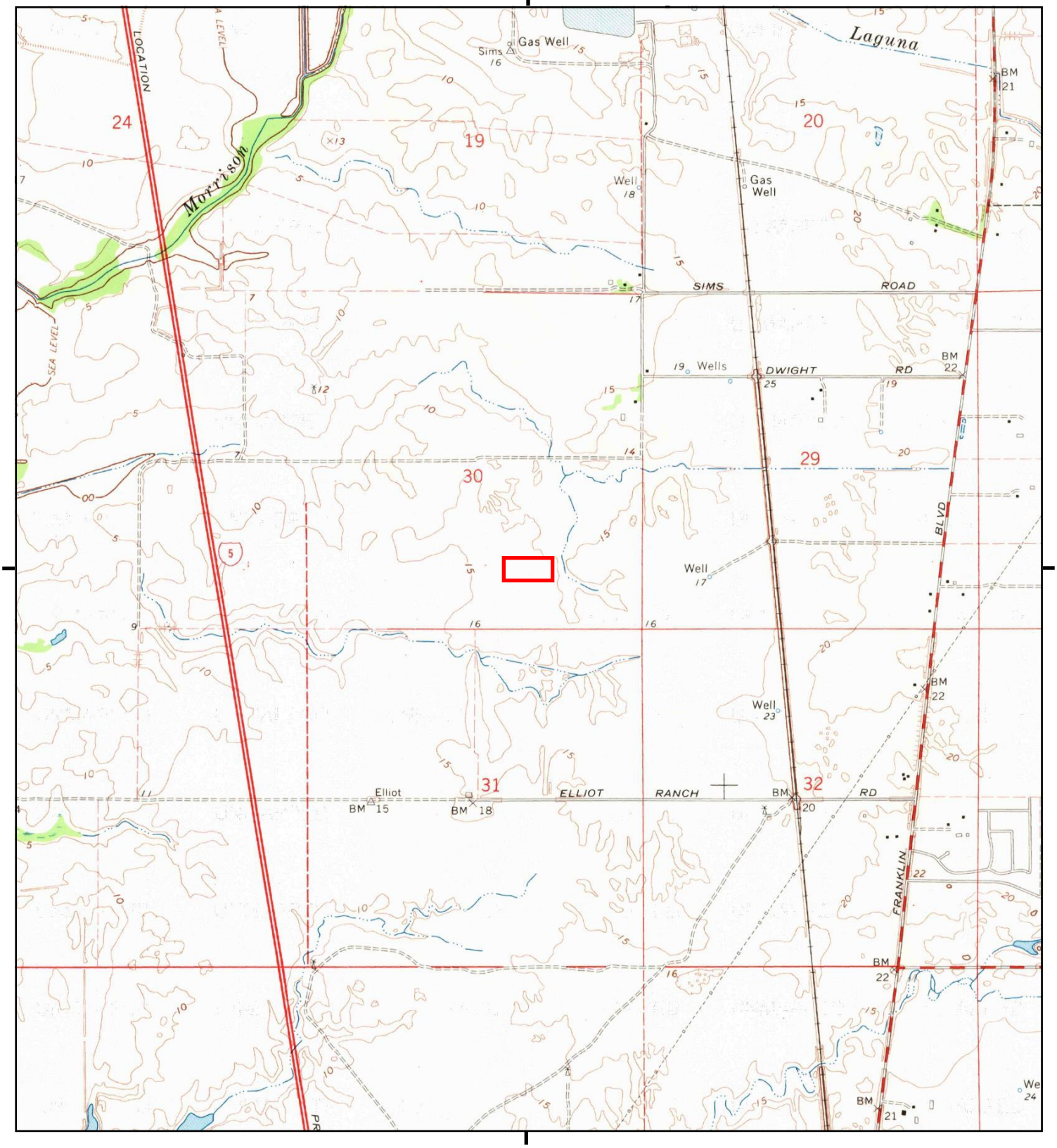
TP, Florin, 1975, 7.5-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

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

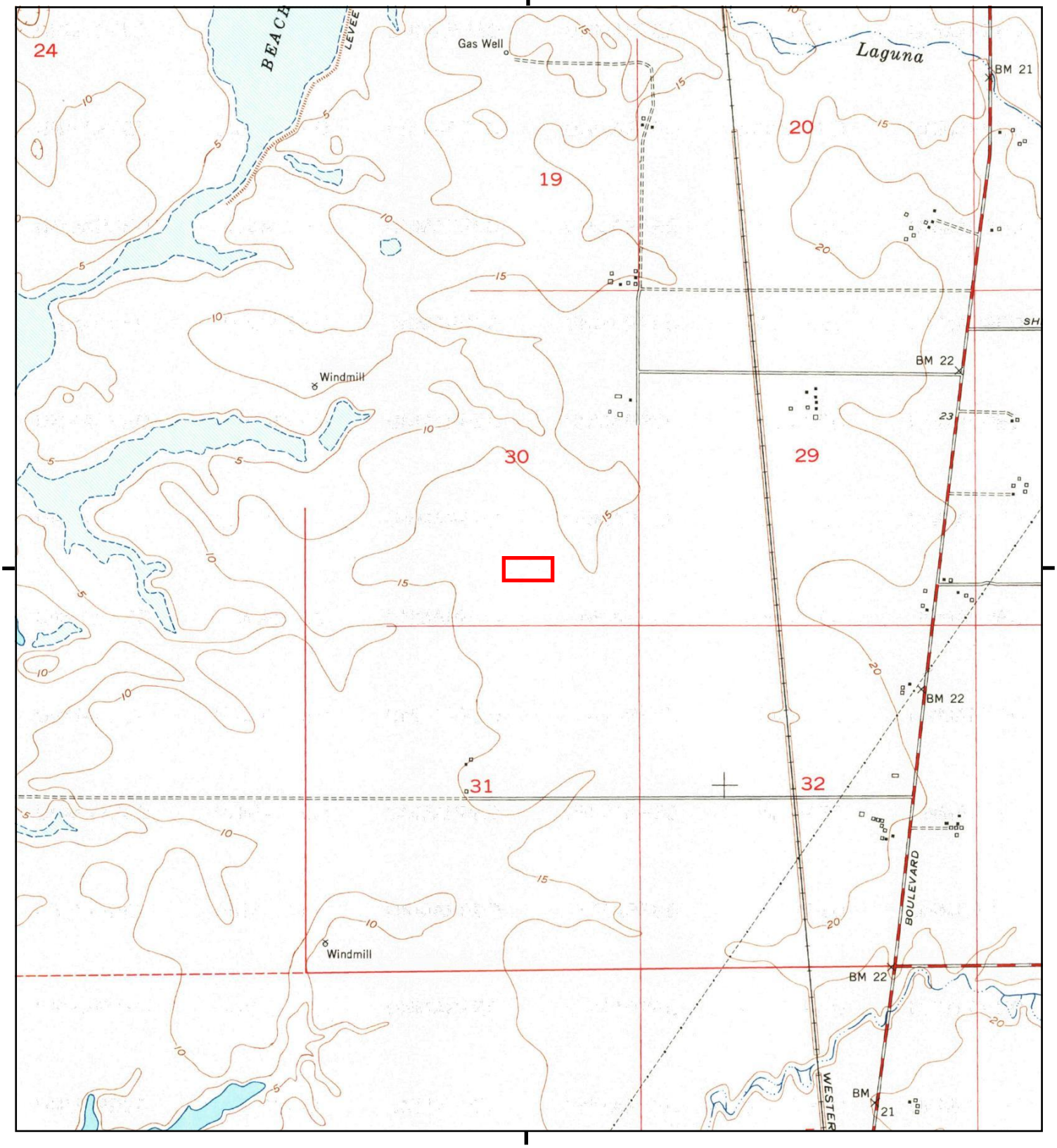
TP, Florin, 1968, 7.5-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

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

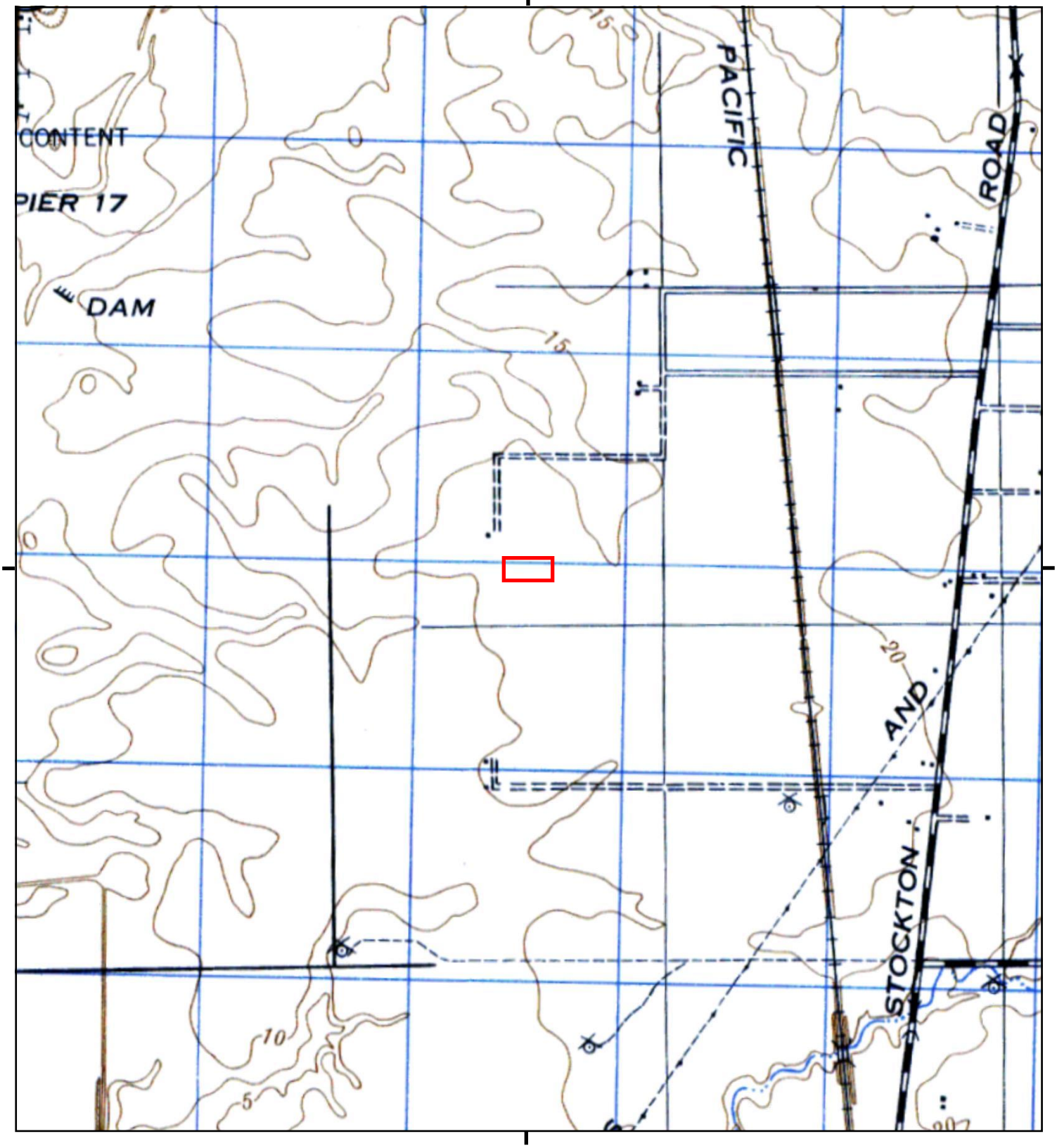
TP, Florin, 1953, 7.5-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

1947



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

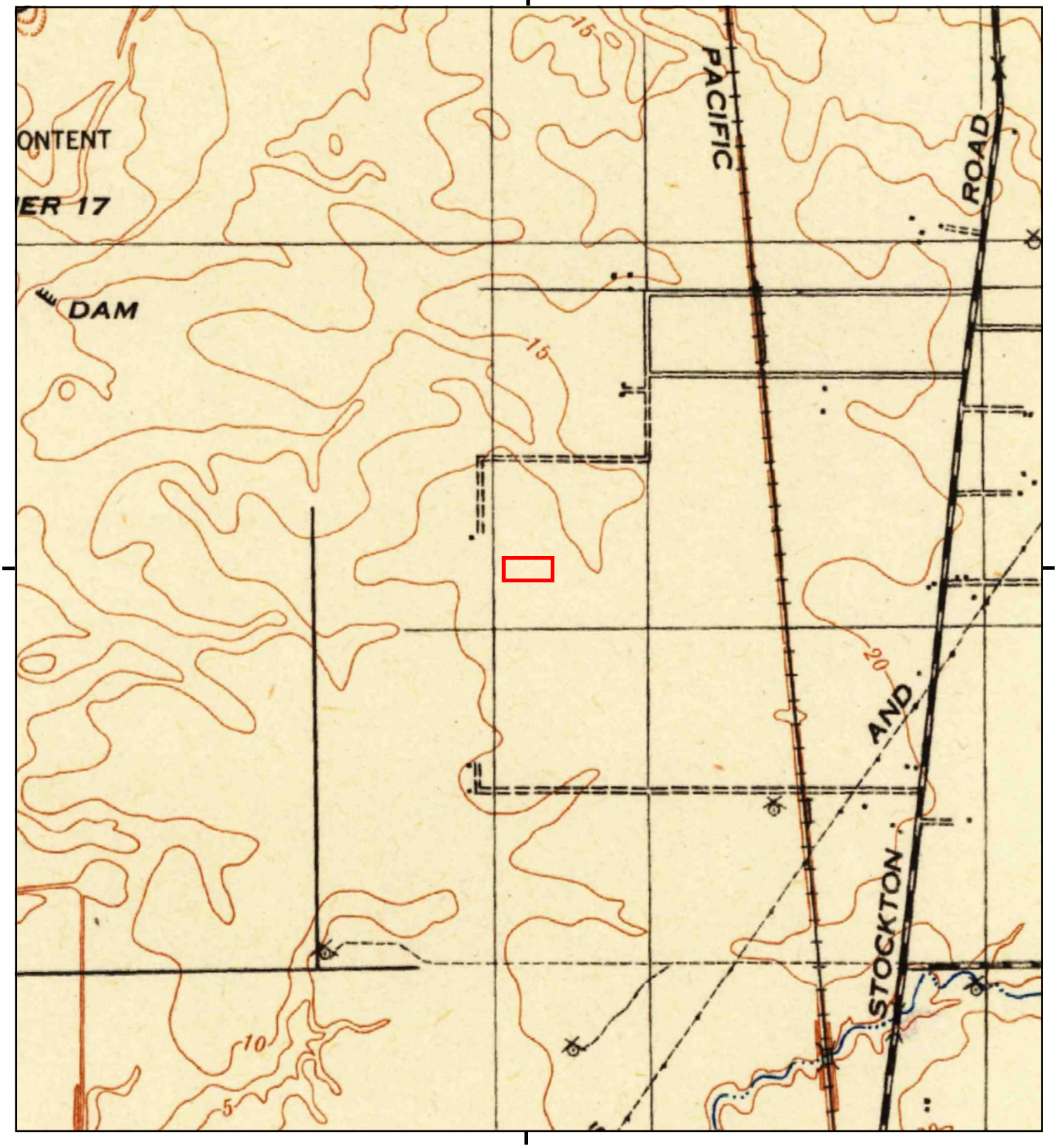
TP, GALT, 1947, 15-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

1941



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

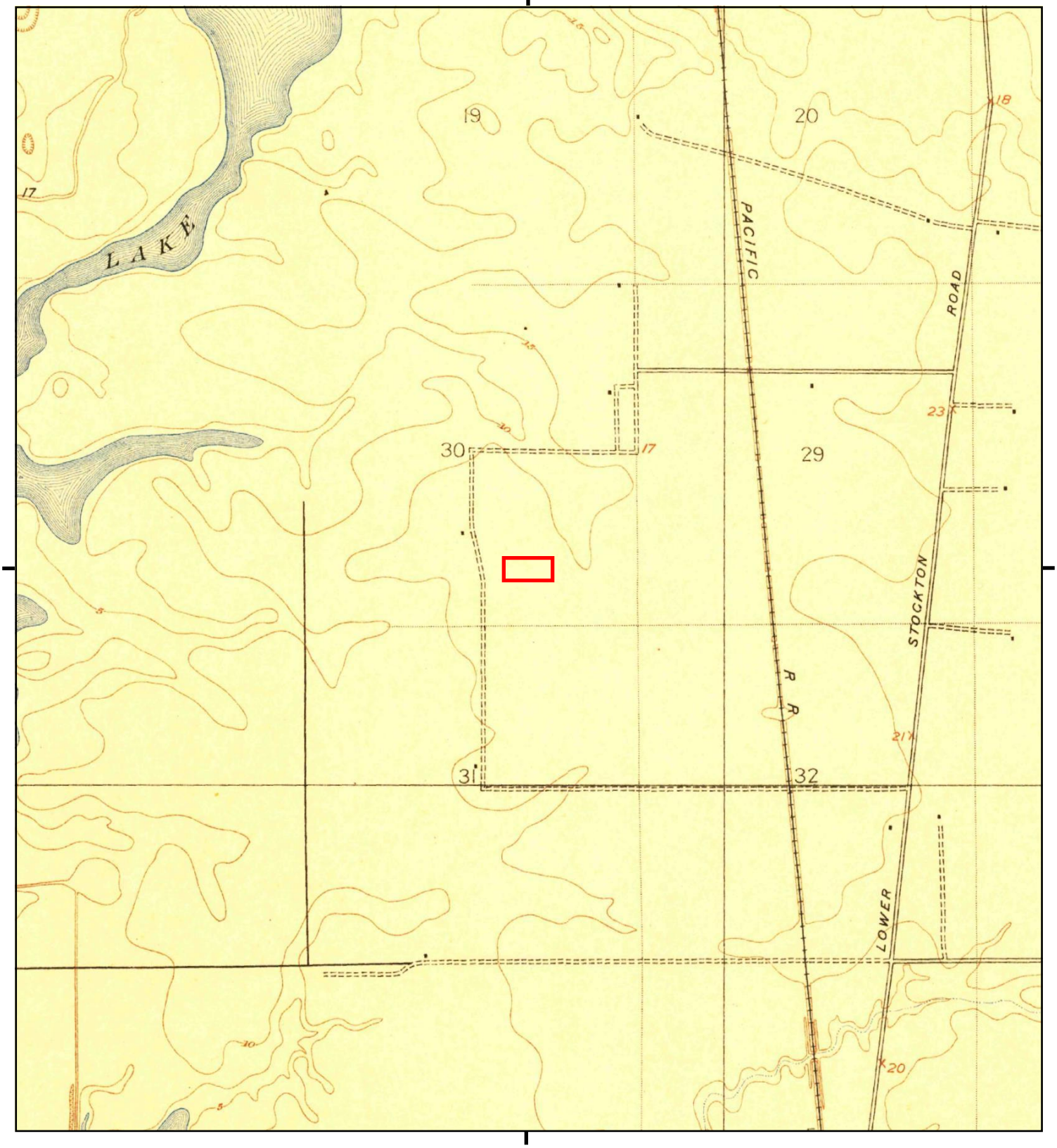
TP, Franklin, 1941, 15-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

1909



This report includes information from the following map sheet(s).

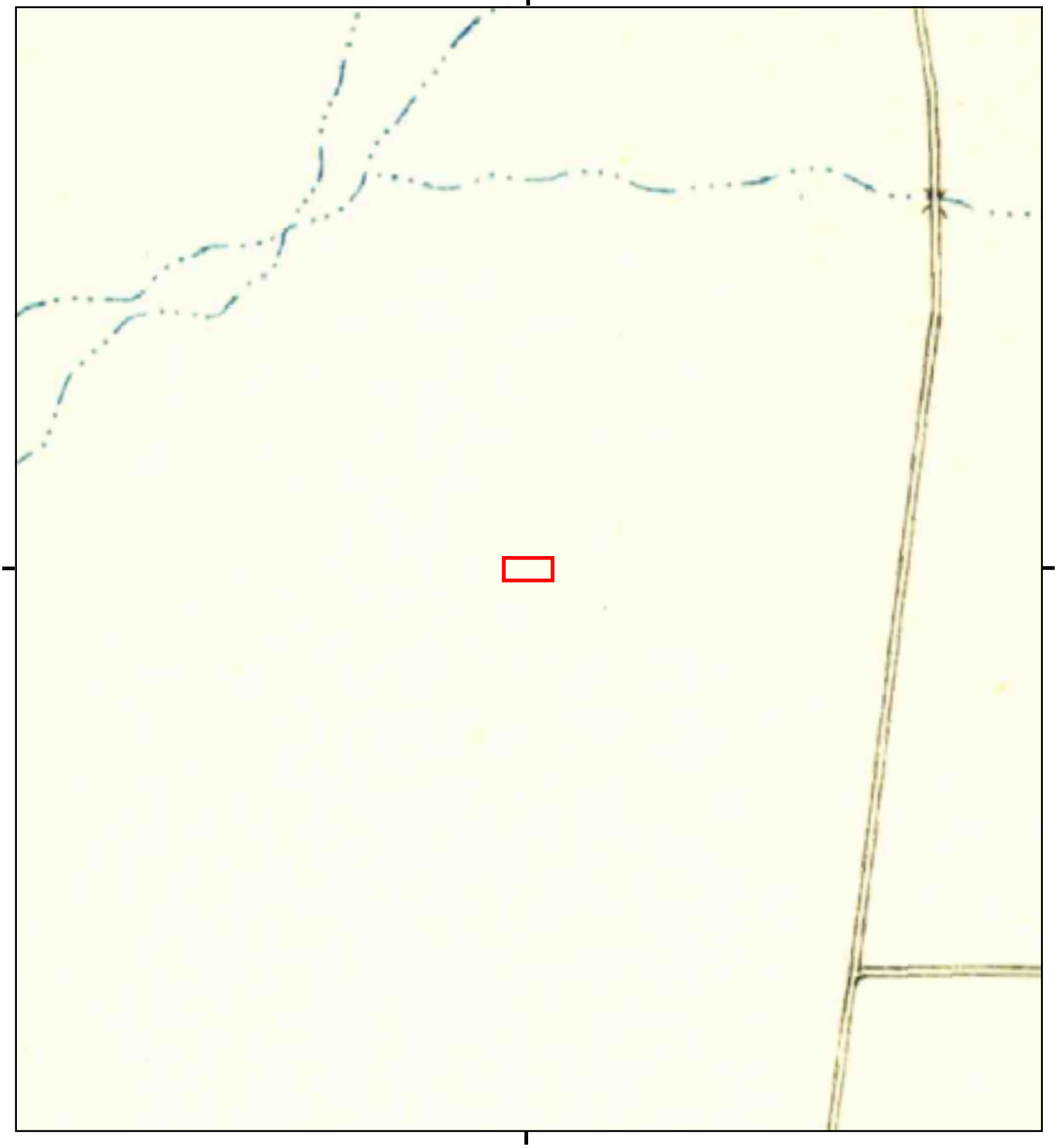
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Florin, 1909, 7.5-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

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, Lodi, 1894, 30-minute

SITE NAME: Laguna Apartments
ADDRESS: 3000 Vaux Ave
Elk Grove, CA 95758
CLIENT: Youngdahl Consulting Group

N

Laguna Apartments
3000 Vaux Ave
Elk Grove, CA 95758

Inquiry Number: 6242735.5
October 30, 2020

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

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
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2006	☑	☐	Haines Criss-Cross Directory
2001	☑	☐	Haines Criss-Cross Directory
1996	☐	☐	Haines Criss-Cross Directory
1990	☐	☐	Haines Criss-Cross Directory
1985	☐	☐	Haines Criss-Cross Directory
1981	☐	☐	Haines Criss-Cross Directory
1975	☐	☐	Haines Criss-Cross Directory
1971	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

3000 Vaux Ave
Elk Grove, CA 95758

Year	*CD Image*	*Source*	

LAGUNA MAIN ST

2017	pg A1	EDR Digital Archive	
2014	pg A3	EDR Digital Archive	
2010	pg A5	EDR Digital Archive	
2006	pg A7	Haines Criss-Cross Directory	
2001	pg A9	Haines Criss-Cross Directory	
1996	-	Haines Criss-Cross Directory	Street not listed in Source
1990	-	Haines Criss-Cross Directory	Street not listed in Source
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1975	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

VAUX AVE

2017	pg A2	EDR Digital Archive	
2014	pg A4	EDR Digital Archive	
2010	pg A6	EDR Digital Archive	
2006	pg A8	Haines Criss-Cross Directory	
2001	pg A10	Haines Criss-Cross Directory	
1996	-	Haines Criss-Cross Directory	Street not listed in Source
1990	-	Haines Criss-Cross Directory	Street not listed in Source
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1975	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LAGUNA MAIN ST 2017

9080	BANK OF AMERICA ATM
	TODO UN POCO PIZZA & MEXICAN BISTRO
9097	LAKESIDE CLEANERS
9098	CLIFFORD J CHAN DDS
	EDWARD JONES FINANCIAL ADVISOR JO
	JOSEPH YOU DDS
	LAGUNA WEST DENTAL CARE IN ELK GROVE
	PETS TO GO
	ROXANNE LEE OD
9101	ALL IN ONE INC
9105	REFLECTIONS SALON
9108	ALDRICH FAMILY CHIROPRACTIC
	ALLSTATE
	ANGELES EDILBERTO DMD
	DAVE RAM INS
	MAIN STREET DENTAL
	SALON CHEVEUX
9109	916 PROPERTIES
	SPACE 4 ART JAM

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

VAUX AVE 2017

3001 STEVEN SCOTT DDSMS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LAGUNA MAIN ST 2014

9080	PHO, HUY
	TODO UN POCO PIZZA & MEXICAN BISTRO
9098	ABEL PET CLINIC
	CHAN CLIFFORD J DDS
	EDWARD JONES FINANCIAL ADVISOR MA
	EPSTEIN, JEREMY R
	KELLY BYAM DVM
	LAGUNA WEST DENTAL CARE
	LAKESIDE CLEANERS
	LEE ROXANNE OD
	LOUIE KINGMAN OD
	PETS TO GO
	UPSCALE REPTILES
	YOU JOSEPH DDS
9105	REFLECTIONS SALON
9108	ALDRICH FAMILY CHIROPRACTIC
	CORTEZ, FRANK
	DAVE RAM ALLSTATE INSURANCE AGENT
	EDILBERTO ANGELES DMD
	MAIN STREET DENTAL
	RAM DAVE INS
	SALON CHEVEUX
9109	AMY WIRTH STATE FARM INSURANCE AGE
	TEA GARDEN
9191	NERONA, YON

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

VAUX AVE 2014

3001 SCOTT STEVEN DDSMS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LAGUNA MAIN ST 2010

9080	SHEEP OF THE GOOD SHEPHERD
	TODO UN POCO PIZZA & BISTRO
9097	LAKESIDE CLEANERS
9098	ABEL PET CLINIC
	BYAM, KELLY A
	CALIFORNIA MINUTE CLINIC INC
	COVINGTON DELORES
	EDWARD JONES
	EPSTEIN, JEREMY R
	EXCLUSIVE REAL ESTATE SVC
	GANDY, JANET
	KINGMAN LOUIE & LEE OPTOMETRY
	LAGUNA WEST DENTAL CARE
	PETS TO GO
	SPEED TERRI L DDS
	STATE FARM INSURANCE
	UPSCALE REPTILES
9105	REFLECTIONS SALON
9108	ABSOLUTE WEIGHT LOSS CLINIC
	DAVE RAMINSURANCE
	MAIN STREET DENTAL
	NEW DAY SPA
	SALON CHEVEUX
	VOLPERT CHIROPRACTIC TOO
9109	ENDLESS SUN TANNING
	TEA GARDEN

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

VAUX AVE 2010

3001 SCOTT STEVEN DDS

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAGUNA MAIN ST 2006

LAGUNA MAIN ST (97)
95758 ELK GROVE

WEALTH CODE 6

9080	★ BAYOU THE	916-691-5272	3
	★ ELLA'S SOUTHERN CATFISH	916-691-1727	4
	★ OASIS ICE CREAM& COFFEE	916-691-2222	8
	★ TODO UN POCO PZZ&MXCN BSTRO	916-684-7774	9

X LAGUNA BLVD

9097	★ LAKESIDE CLEANERS	916-691-1493	B
9098	★ ABEL PET CLINIC	916-684-6854	B
	★ CHAN CLIFFORD J DDS	916-683-7300	9
	★ EDWARD JONES — INVESTMTS	916-691-4665	2
	★ GANDY CHRIS	916-684-2655	D
	★ GOLDEN OTASHE DR	916-691-6780	2
	★ KELLY BYAM DVM	916-684-6854	3
	★ LAGUNA WEST DENTAL CARE	916-683-7300	8
	★ LAGUNA WEST MEDICAL GROUP	916-691-6780	B
	★ LOUIE KINGMAN J DR	916-691-2020	2
	★ PETS TO GO	916-691-7387	B
	★ SPEED TERRI L DDS	916-691-1600	9
	★ UPSCALE REPTILES	916-691-7387	3
	★ YOU JOSEPH DDS	916-683-7300	7

X RENWICK AVE

9108 . . . . . BUILDING

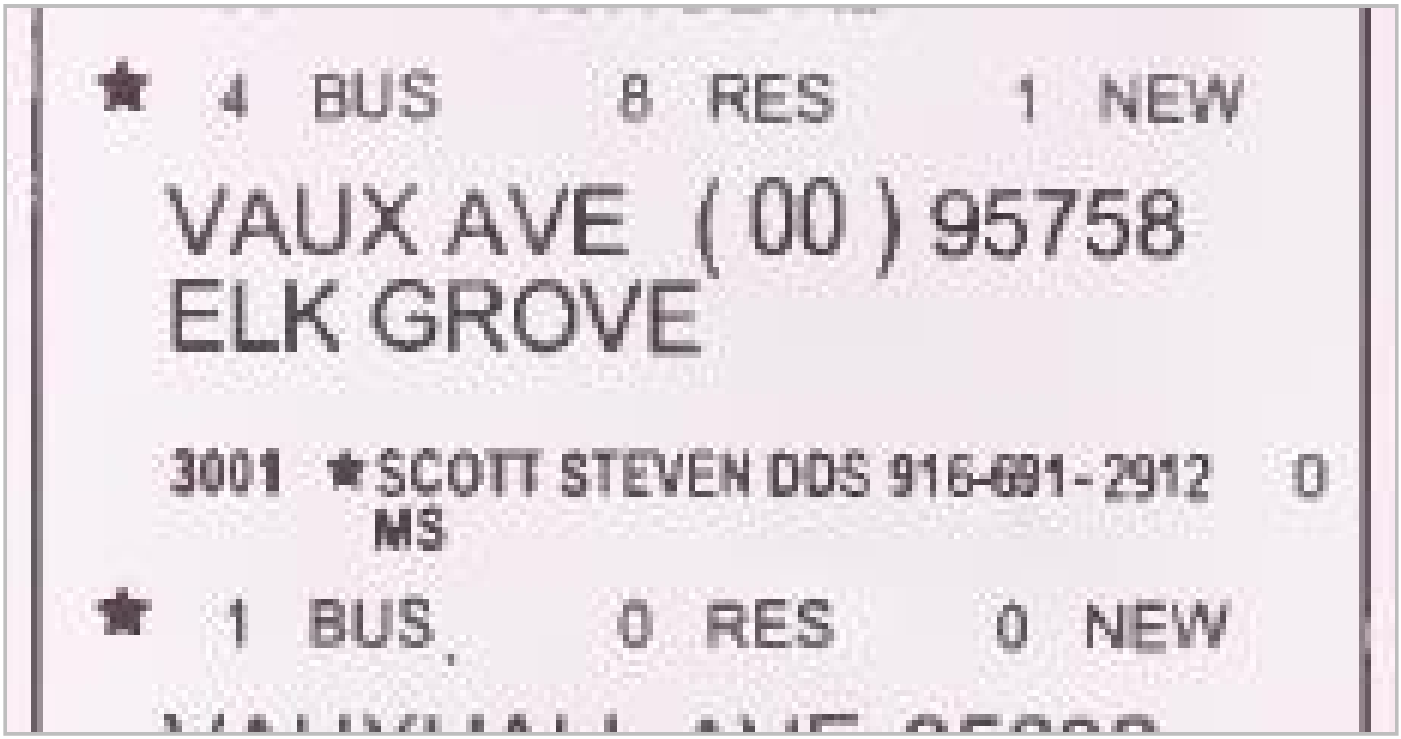
	★ ALLSTATE INS	916-684-8660	B
	★ ALLSTATE INS CO	916-683-1105	B
	★ FOOTWORKS	916-683-3668	9
	★ MAIN STREET DENTAL	916-691-1840	B
	★ MIX GODFREY F DPM	916-683-1287	9
	★ NEW DAY SPA THE	916-683-2706	+6
	★ NEW DAY SPA THE	916-683-3668	+6
	★ NEW DAY SPA THE	916-683-4942	+6
	★ PREVISUALISTS INC	916-683-3210	9
	★ RAM DAVE INSURANCE	916-684-3753	+6
	★ SALON CHEVEUX	916-691-1077	B
	★ VOLPERT CHIROPRACTIC TOO	916-691-9500	1

9108 . . . . . .

★ 30 BUS D RES 4 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

VAUX AVE 2006



★ 4 BUS 8 RES 1 NEW

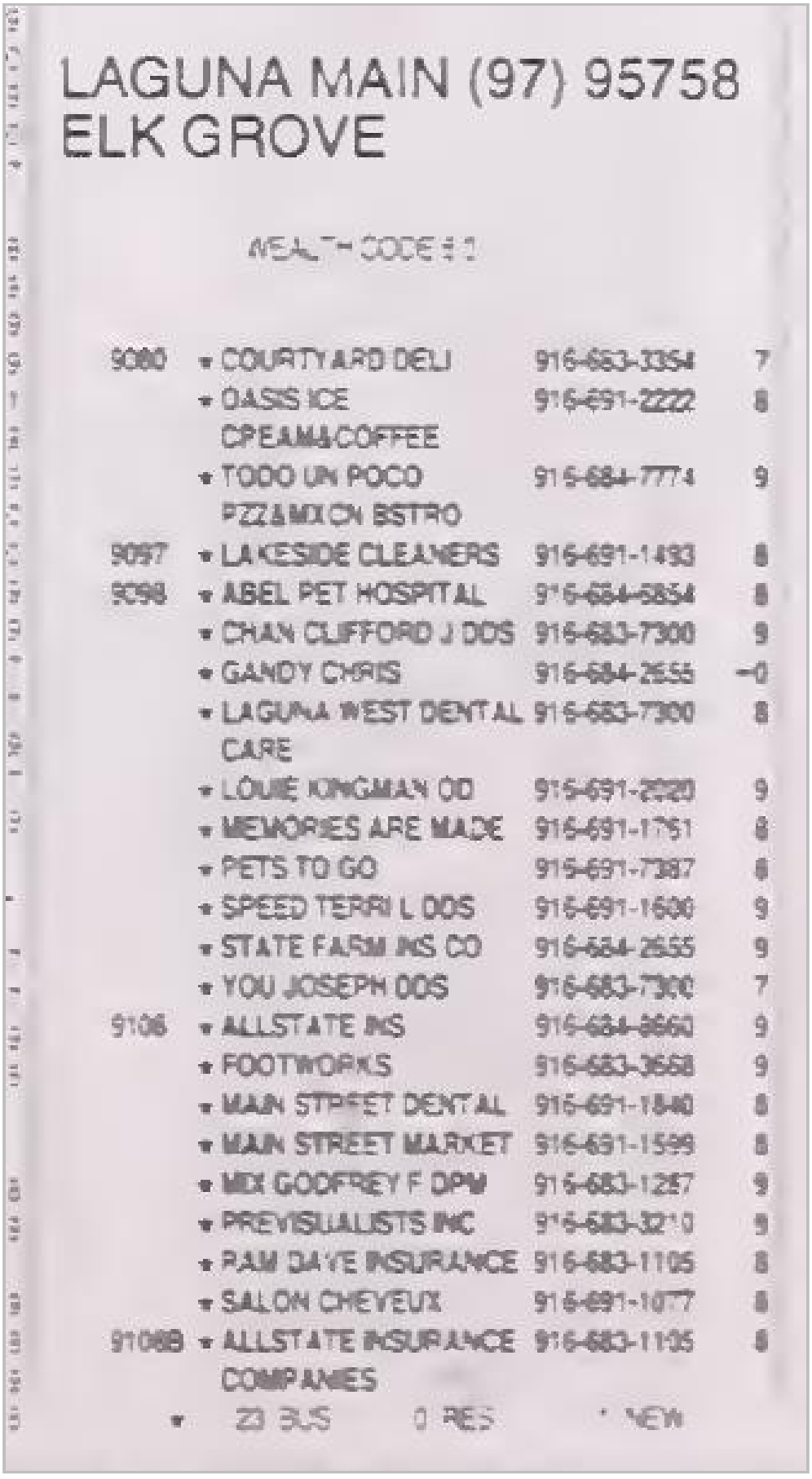
VAUX AVE (00) 95758
ELK GROVE

3001 ★SCOTT STEVEN DDS 916-691-2912 0
MS

★ 1 BUS 0 RES 0 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAGUNA MAIN ST 2001



LAGUNA MAIN (97) 95758
ELK GROVE

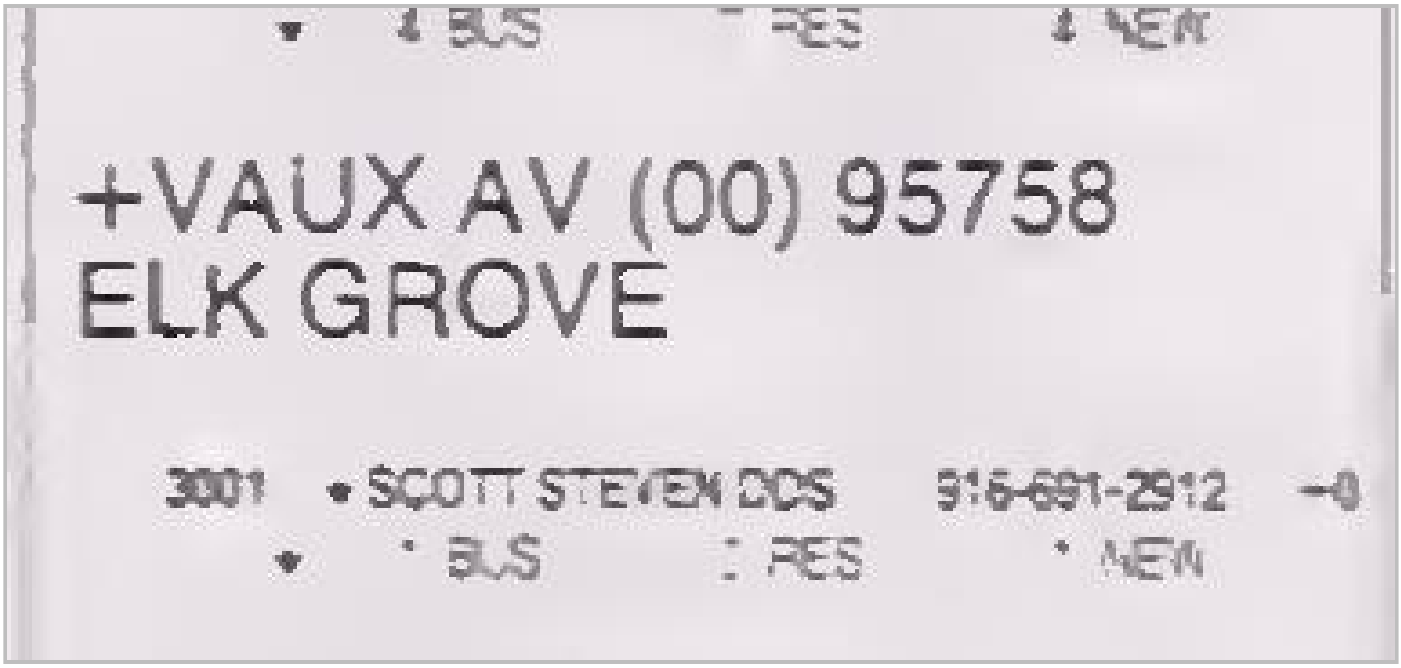
HEALTH CODE # 1

9080	• COURTYARD DELI	916-683-3354	7
	• OASIS ICE CREAM&COFFEE	916-691-2222	8
	• TODO UN POCO PZZ&MXCN BSTRO	916-684-7774	9
9097	• LAKESIDE CLEANERS	916-691-1493	8
9098	• ABEL PET HOSPITAL	916-684-5854	8
	• CHAN CLIFFORD J DDS	916-683-7300	9
	• GANDY CHRIS	916-684-2655	-0
	• LAGUNA WEST DENTAL CARE	916-683-7300	8
	• LOUIE KONGMAN OD	916-691-2020	9
	• MEMORIES ARE MADE	916-691-1751	8
	• PETS TO GO	916-691-7387	8
	• SPEED TERRI L DDS	916-691-1600	9
	• STATE FARM INS CO	916-684-2555	9
	• YOU JOSEPH DDS	916-683-7300	7
9106	• ALLSTATE INS	916-684-9660	9
	• FOOTWORKS	916-683-3668	9
	• MAIN STREET DENTAL	916-691-1840	8
	• MAIN STREET MARKET	916-691-1599	8
	• MIX GODFREY F DPM	916-683-1257	9
	• PREVISUALISTS INC	916-683-3210	9
	• RAM DAVE INSURANCE	916-683-1105	8
	• SALON CHEVEUX	916-691-1077	8
9106B	• ALLSTATE INSURANCE COMPANIES	916-683-1105	8

• 23 BUS 0 RES • NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

VAUX AVE 2001



Laguna Apartments
3000 Vaux Ave
Elk Grove, CA 95758

Inquiry Number: 6242735.3
October 27, 2020

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

10/27/20

Site Name:

Laguna Apartments
3000 Vaux Ave
Elk Grove, CA 95758
EDR Inquiry # 6242735.3

Client Name:

Youngdahl Consulting Group
1234 Glenhaven Court
El Dorado Hills, CA 95762
Contact: Dennis Eck

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Certified Sanborn Results:

Certification # FF17-4714-A0A2

PO # P20-545

Project Laguna Apartments

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: FF17-4714-A0A2

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

The Sanborn Library LLC Since 1866™

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APPENDIX C
EDR Radius Map Report with GeoCheck®

Laguna Apartments
3000 Vaux Ave
Elk Grove, CA 95758

Inquiry Number: 6242735.2s
October 27, 2020

The EDR Radius Map™ Report with GeoCheck®

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

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EXECUTIVE SUMMARY

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TARGET PROPERTY INFORMATION

ADDRESS

3000 VAUX AVE
ELK GROVE, CA 95758

COORDINATES

Latitude (North):	38.4258910 - 38° 25' 33.20''
Longitude (West):	121.4701230 - 121° 28' 12.44''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	633545.6
UTM Y (Meters):	4253972.0
Elevation:	17 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5619710 FLORIN, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140621
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
3000 VAUX AVE
ELK GROVE, CA 95758

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LAKESIDE CLEANERS	9097 LAGUNA MAIN ST	EDR Hist Cleaner	Higher	133, 0.025, North
A2	LAKESIDE CLEANERS	9098 LAGUNA MAIN ST	DRYCLEANERS, Sacramento Co. ML, HWTS	Higher	248, 0.047, North
A3	ABEL PET CLINIC INC	9098 LAGUNA MAIN ST	RCRA NonGen / NLR	Higher	248, 0.047, North
A4	LAKESIDE CLEANERS	9098 LAGUNA MAIN STR	Sacramento Co. ML, CERS	Higher	248, 0.047, North
A5	LAKESIDE CLEANERS	9098 LAGUNA MAIN ST	EDR Hist Cleaner	Higher	248, 0.047, North
A6	ABEL PET CLINIC	9098 LAGUNA MAIN ST,	Sacramento Co. ML	Higher	248, 0.047, North
A7	TERRI L SPEED DDS	9098 LAGUNA MAIN ST,	Sacramento Co. ML	Higher	248, 0.047, North
A8	LAKESIDE CLEANERS	9098 LAGUNA MAIN ST	RCRA NonGen / NLR	Higher	248, 0.047, North
A9	FRANCIS M JOVEN D.M.	9098 LAGUNA MAIN ST	RCRA NonGen / NLR	Higher	248, 0.047, North
A10	LAGUNA WEST DENTAL C	9098 LAGUNA MAIN ST	Sacramento Co. ML	Higher	248, 0.047, North
11	APPLE, INC	2911 LAGUNA BLVD	AST	Higher	613, 0.116, NNW
B12	APPLE, INC	2911 LAGUNA BLVD BLD	AST	Higher	775, 0.147, NW
B13	APPLE	2911 LAGUNA BLVD	RCRA-LQG, FINDS, ECHO, WDS	Higher	775, 0.147, NW
B14	APPLE, INC	2911 LAGUNA BLVD BLD	Sacramento Co. ML	Higher	775, 0.147, NW
15	PEGATRON	2811 LAGUNA BLVD	RCRA-SQG	Higher	1003, 0.190, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-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

EXECUTIVE SUMMARY

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR ---------- EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

LUST ---------- Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
CPS-SLIC ---------- Statewide SLIC Cases
Sacramento Co. CS ---------- Toxic Site Clean-Up List

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
UST ---------- Active UST Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

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

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered 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

EXECUTIVE SUMMARY

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
CDL	Clandestine Drug Labs
CERS HAZ WASTE	CERS HAZ WASTE
Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	National Clandestine Laboratory Register
PFAS	PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

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

Local Land Records

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

Records of Emergency Release Reports

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

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
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
UXO - Unexploded Ordnance Sites
ECHO - Enforcement & Compliance History Information
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
EMI - Emissions Inventory Data
ENF - Enforcement Action Listing
Financial Assurance - Financial Assurance Information Listing
HAZNET - Facility and Manifest Data
ICE - ICE
HIST CORTESE - Hazardous Waste & Substance Site List
HWP - EnviroStor Permitted Facilities Listing
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
NPDES - NPDES Permits Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
Notify 65 - Proposition 65 Records
UIC - UIC Listing
UIC GEO - UIC GEO (GEOTRACKER)
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
MILITARY PRIV SITES - MILITARY PRIV SITES (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
WDR - Waste Discharge Requirements Listing
CIWQS - California Integrated Water Quality System
CERS - CERS
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)
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

EXECUTIVE SUMMARY

EDR Hist Auto---------- EDR Exclusive Historical Auto Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

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

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

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

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

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 06/15/2020 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
APPLE EPA ID:: CAR000004457	***2911 LAGUNA BLVD***	***NW 1/8 - 1/4 (0.147 mi.)***	***B13***	***23***

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 06/15/2020 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
PEGATRON	2811 LAGUNA BLVD	NW 1/8 - 1/4 (0.190 mi.)	15	27

EPA ID:: CAR000278168

State and tribal registered storage tank lists

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
APPLE, INC Database: AST, Date of Government Version: 07/06/2016	2911 LAGUNA BLVD	NNW 0 - 1/8 (0.116 mi.)	11	21
APPLE, INC Database: AST, Date of Government Version: 07/06/2016	2911 LAGUNA BLVD BLD	NW 1/8 - 1/4 (0.147 mi.)	B12	22

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

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

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/15/2020 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ABEL PET CLINIC INC EPA ID:: CAL000219678	9098 LAGUNA MAIN ST	N 0 - 1/8 (0.047 mi.)	A3	11
LAKESIDE CLEANERS EPA ID:: CAL000301611	9098 LAGUNA MAIN ST	N 0 - 1/8 (0.047 mi.)	A8	16
FRANCIS M JOVEN D.M. EPA ID:: CAL000425290	9098 LAGUNA MAIN ST	N 0 - 1/8 (0.047 mi.)	A9	18

DRYCLEANERS: 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 cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAKESIDE CLEANERS Database: DRYCLEANERS, Date of Government Version: 06/04/2020	***9098 LAGUNA MAIN ST***	***N 0 - 1/8 (0.047 mi.)***	***A2***	***9***

EPA Id: CAL000301611

Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 02/24/2020 has revealed that there are 6 Sacramento Co. ML sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAKESIDE CLEANERS	***9098 LAGUNA MAIN ST***	***N 0 - 1/8 (0.047 mi.)***	***A2***	***9***
LAKESIDE CLEANERS	***9098 LAGUNA MAIN STR***	***N 0 - 1/8 (0.047 mi.)***	***A4***	***13***
Facility Status: Inactive. Included on a listing no longer updated.				
ABEL PET CLINIC	9098 LAGUNA MAIN ST,	N 0 - 1/8 (0.047 mi.)	A6	14
TERRI L SPEED DDS	9098 LAGUNA MAIN ST,	N 0 - 1/8 (0.047 mi.)	A7	15
LAGUNA WEST DENTAL C	9098 LAGUNA MAIN ST	N 0 - 1/8 (0.047 mi.)	A10	21
APPLE, INC	2911 LAGUNA BLVD BLD	NW 1/8 - 1/4 (0.147 mi.)	B14	26

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: 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.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 2 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

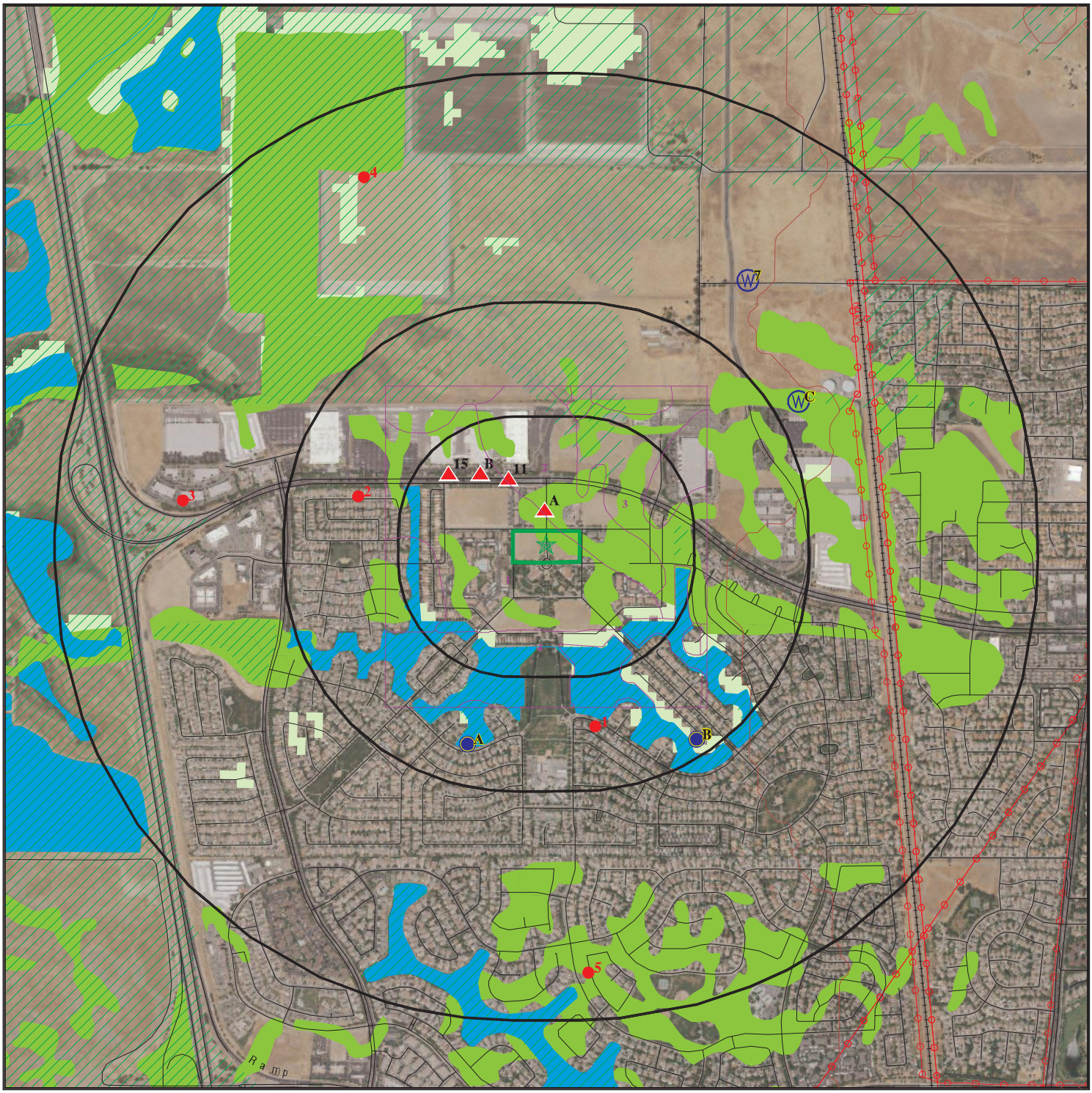
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAKESIDE CLEANERS	9097 LAGUNA MAIN ST	N 0 - 1/8 (0.025 mi.)	A1	9
LAKESIDE CLEANERS	9098 LAGUNA MAIN ST	N 0 - 1/8 (0.047 mi.)	A5	14

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
LAGUNA WEST RETAIL SHOPS	CIWQS
LAGUNA WEST RETAIL SHOPS	CIWQS

OVERVIEW MAP - 6242735.2S



- 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: Laguna Apartments	CLIENT: Youngdahl Consulting Group
ADDRESS: 3000 Vaux Ave Elk Grove CA 95758	CONTACT: Dennis Eck INQUIRY #: 6242735.2s
LAT/LONG: 38.425891 / 121.470123	DATE: October 27, 2020 12:20 pm

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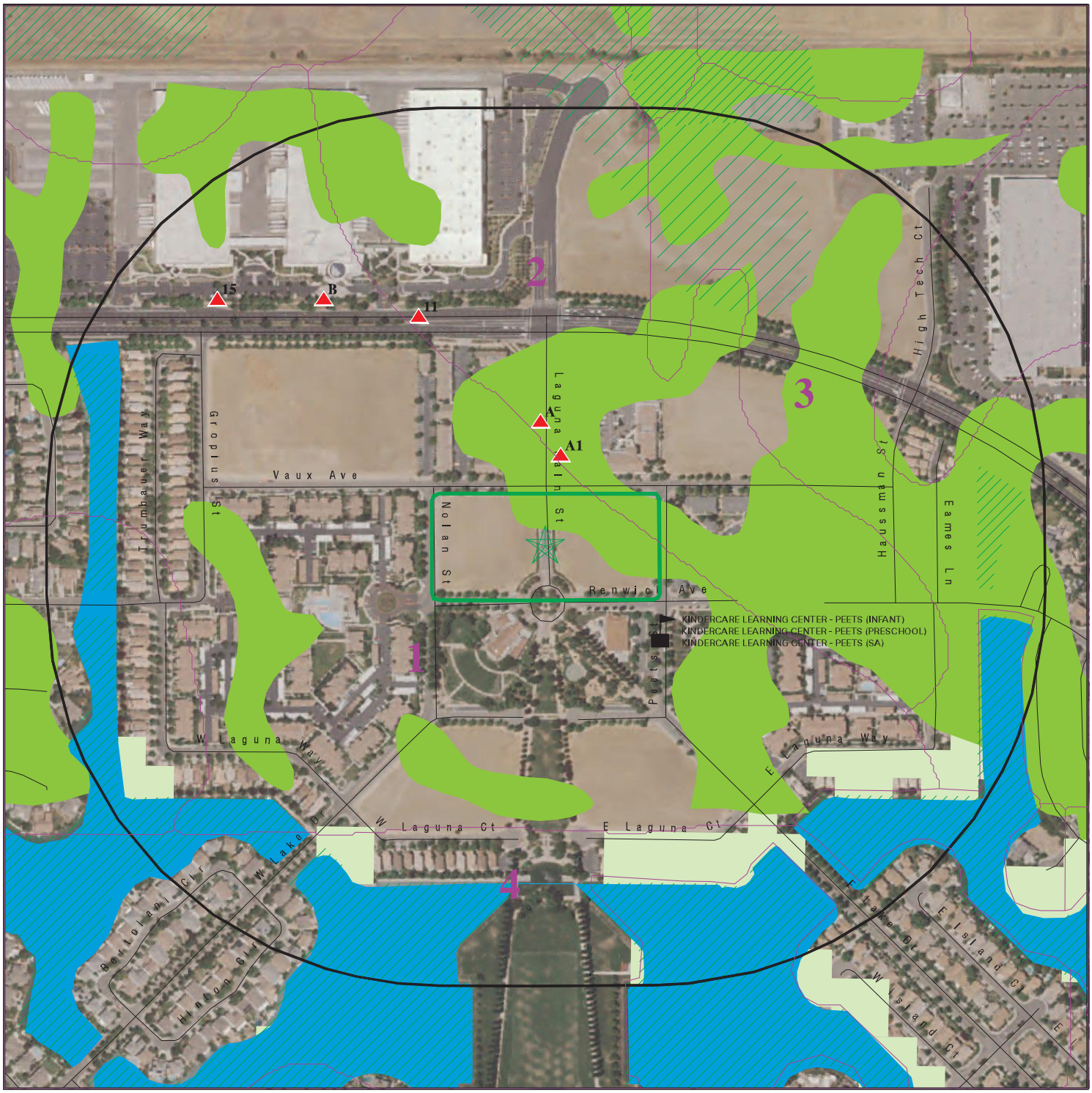
DETAIL MAP - 6242735.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- 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: Laguna Apartments	CLIENT: Youngdahl Consulting Group
ADDRESS: 3000 Vaux Ave Elk Grove CA 95758	CONTACT: Dennis Eck INQUIRY #: 6242735.2s
LAT/LONG: 38.425891 / 121.470123	DATE: October 27, 2020 12:22 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	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	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	1	NR	NR	NR	1
RCRA-SQG	0.250		0	1	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	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	0	NR	0
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
Sacramento Co. CS	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		1	1	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		3	0	NR	NR	NR	3
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		1	0	NR	NR	NR	1
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
Sacramento Co. ML	0.250		5	1	NR	NR	NR	6
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		2	NR	NR	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	12	4	0	0	0	16

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

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **LAKESIDE CLEANERS** **EDR Hist Cleaner** **1020023739**
North **9097 LAGUNA MAIN ST STE 2** **N/A**
< 1/8 **ELK GROVE, CA 95758**
0.025 mi.
133 ft. **Site 1 of 10 in cluster A**

Relative: EDR Hist Cleaner
Higher

Actual: **17 ft.**

Year:	Name:	Type:
1998	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
1999	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2000	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2001	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2002	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2003	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2004	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2005	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs

A2 **LAKESIDE CLEANERS** **DRYCLEANERS** **S108541002**
North **9098 LAGUNA MAIN ST STE 2** **Sacramento Co. ML** **N/A**
< 1/8 **ELK GROVE, CA 95758** **HWTS**
0.047 mi.
248 ft. **Site 2 of 10 in cluster A**

Relative: DRYCLEANERS:
Higher

Actual: **17 ft.**

Name:	LAKESIDE CLEANERS
Address:	9098 LAGUNA MAIN ST STE 2
City,State,Zip:	ELK GROVE, CA 957587449
EPA Id:	CAL000301611
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	12/21/2005
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Owner Name:	SUNG KIM
Owner Address:	9547 ROBLIN CT
Owner Address 2:	Not reported
Owner Telephone:	9166911493
Contact Name:	SUNGKIM
Contact Address:	9547 ROBLIN CT
Contact Address 2:	9098 LAGUNA MAIN ST
Contact Telephone:	9166911493
Mailing Name:	Not reported
Mailing Address 1:	9098 LAGUNA MAIN ST STE 2
Mailing Address 2:	Not reported
Mailing City:	ELK GROVE
Mailing State:	CA
Mailing Zip:	957587449
Owner Fax:	0
Region Code:	1

Sacramento Co. ML:

Name:	LAKE SIDE CLEANERS
Address:	9098 LAGUNA MAIN ST STE 2
City,State,Zip:	ELK GROVE, CA 95758
Facility Id:	Not reported

LAKESIDE CLEANERS (Continued) **S108541002**

Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	A
Billing Codes UST:	Not reported
WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

HWTS:

Name:	LAKESIDE CLEANERS
Address:	9098 LAGUNA MAIN ST STE 2
Address 2:	Not reported
City,State,Zip:	ELK GROVE, CA 957587449
EPA ID:	CAL000301611
Inactive Date:	Not reported
Create Date:	12/21/2005
Last Act Date:	09/13/2019
Mailing Name:	Not reported
Mailing Address:	9098 LAGUNA MAIN ST STE 2
Mailing Address 2:	Not reported
Mailing City,State,Zip:	ELK GROVE, CA 957587449
Owner Name:	SUNG KIM
Owner Address:	9547 ROBLIN CT
Owner Address 2:	Not reported
Owner City,State,Zip:	ELK GROVE, CA 957581074
Contact Name:	SUNGKIM
Contact Address:	9547 ROBLIN CT
Contact Address 2:	9098 LAGUNA MAIN ST
City,State,Zip:	ELK GROVE, CA 95758

NAICS:

EPA ID:	CAL000301611
Create Date:	2005-12-21 10:44:36
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
Issued EPA ID Date:	2005-12-21 10:44:36
Inactive Date:	Not reported
Facility Name:	LAKESIDE CLEANERS
Facility Address:	9098 LAGUNA MAIN ST STE 2
Facility Address 2:	Not reported
Facility City:	ELK GROVE
Facility County:	34
Facility State:	CA
Facility Zip:	957587449

A3
North
< 1/8
0.047 mi.
248 ft.

ABEL PET CLINIC INC
9098 LAGUNA MAIN ST STE 1
ELK GROVE, CA 95758

Site 3 of 10 in cluster A

RCRA NonGen / NLR **1024800362**
CAL000219678

Relative:
Higher

Actual:
17 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2000-06-01 00:00:00.0
Handler Name:	ABEL PET CLINIC INC
Handler Address:	9098 LAGUNA MAIN ST STE 1
Handler City,State,Zip:	ELK GROVE, CA 95758-0000
EPA ID:	CAL000219678
Contact Name:	KELLY BYAM/DVM/OWNER-PRES
Contact Address:	9098 LAGUNA MAIN ST STE 1
Contact City,State,Zip:	ELK GROVE, CA 95758
Contact Telephone:	916-684-6854
Contact Fax:	000-000-0000
Contact Email:	KABYAM@YAHOO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	9098 LAGUNA MAIN ST STE 1
Mailing City,State,Zip:	ELK GROVE, CA 95758-0000
Owner Name:	ABEL PET CLINIC INC
Owner Type:	Other
Operator Name:	KELLY BYAM/DVM/OWNER-PRES
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

ABEL PET CLINIC INC (Continued) **1024800362**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:45:13.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ABEL PET CLINIC INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	9098 LAGUNA MAIN ST STE 1
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758-0000
Owner/Operator Telephone:	000-000-0000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	KELLY BYAM/DVM/OWNER-PRES
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	9098 LAGUNA MAIN ST STE 1
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758
Owner/Operator Telephone:	916-684-6854
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

ABEL PET CLINIC INC (Continued) **1024800362**

Historic Generators:

Receive Date:	2000-06-01 00:00:00.0
Handler Name:	ABEL PET CLINIC INC
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	54194
NAICS Description:	VETERINARY SERVICES

Facility Has Received Notices of Violation:

No Violations Found:

Evaluation Action Summary:

No Evaluations Found:

A4 **LAKESIDE CLEANERS** **Sacramento Co. ML** **S110041628**
North **9098 LAGUNA MAIN STREET #2** **CERS** **N/A**
< 1/8 **ELK GROVE, CA 95758**
0.047 mi.
248 ft. **Site 4 of 10 in cluster A**

Relative:
Higher

Actual:
17 ft.

Sacramento Co. ML:

Name:	LAKE SIDE CLEANERS
Address:	9098 LAGUNA MAIN ST
City,State,Zip:	LAGUN, CA 95758
Facility Id:	Not reported
Facility Status:	Inactive. Included on a listing no longer updated.
FD:	Not reported
Billing Codes BP:	Disclaimer
Billing Codes UST:	No Tanks
WG Bill Code:	Oil Changed by Outside Company-No Fee
Target Property Bill Cod:	50
Food Bill Code:	50
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	0
UST Tank Test Date:	Not reported
SIC Code:	7216
Tier Permitting:	Not reported
AST Bill Code:	Not reported

LAKESIDE CLEANERS (Continued) **S110041628**

CALARP Bill Code: Not reported

CERS:
Name: LAKESIDE CLEANERS
Address: 9098 LAGUNA MAIN STREET #2
City,State,Zip: ELK GROVE, CA 95758
Site ID: 476767
CERS ID: 110017420129
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:
Affiliation Type Desc: Public Contact
Entity Name: KIL ROK KIM
Entity Title: Not reported
Affiliation Address: 9098 LAGUNA MAIN ST 2
Affiliation City: ELKGROVE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

A5 **LAKESIDE CLEANERS** **EDR Hist Cleaner** **1020023740**
North **9098 LAGUNA MAIN ST STE 2** **N/A**
< 1/8 **ELK GROVE, CA 95758**
0.047 mi.
248 ft. **Site 5 of 10 in cluster A**

Relative: EDR Hist Cleaner
Higher
Actual:
17 ft.

Year:	Name:	Type:
2006	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2007	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2008	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2009	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2010	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2011	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2012	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2013	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs
2014	LAKESIDE CLEANERS	Drycleaning Plants, Except Rugs

A6 **ABEL PET CLINIC** **Sacramento Co. ML** **S102956321**
North **9098 LAGUNA MAIN ST, #1** **N/A**
< 1/8 **ELK GROVE, CA 95758**
0.047 mi.
248 ft. **Site 6 of 10 in cluster A**

Relative: Sacramento Co. ML:
Higher
Actual:
17 ft.
Name: ABEL PET CLINIC
Address: 9098 LAGUNA MAIN ST, #1
City,State,Zip: ELK GROVE, CA 95758
Facility Id: Not reported
Facility Status: Not reported
FD: Not reported
Billing Codes BP: I
Billing Codes UST: Not reported

ABEL PET CLINIC (Continued) **S102956321**

WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

A7 **TERRI L SPEED DDS** **Sacramento Co. ML** **S103707711**
North **9098 LAGUNA MAIN ST, #4** **N/A**
< 1/8 **ELK GROVE, CA 95758**
0.047 mi.
248 ft. **Site 7 of 10 in cluster A**

Relative: **Higher**

Actual: **17 ft.**

Sacramento Co. ML:

Name:	TERRI L SPEED DDS
Address:	9098 LAGUNA MAIN ST, #4
City,State,Zip:	ELK GROVE, CA 95758
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	Not reported
WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

A8 **LAKESIDE CLEANERS** **RCRA NonGen / NLR** **1024812866**
North **9098 LAGUNA MAIN ST STE 2** **CAL000301611**
< 1/8 **ELK GROVE, CA 95758**
0.047 mi.
248 ft. **Site 8 of 10 in cluster A**

Relative:
Higher

Actual:
17 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2005-12-21 00:00:00.0
Handler Name:	LAKESIDE CLEANERS
Handler Address:	9098 LAGUNA MAIN ST STE 2
Handler City,State,Zip:	ELK GROVE, CA 95758-7449
EPA ID:	CAL000301611
Contact Name:	SUNGKIM JOHNSTONE
Contact Address:	9547 ROBLIN CT
Contact City,State,Zip:	ELK GROVE, CA 95758
Contact Telephone:	916-691-1493
Contact Fax:	916-691-1493
Contact Email:	SUNGYEO2275@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	9098 LAGUNA MAIN ST STE 2
Mailing City,State,Zip:	ELK GROVE, CA 95758-7449
Owner Name:	SUNG KIM
Owner Type:	Other
Operator Name:	SUNGKIM JOHNSTONE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

LAKESIDE CLEANERS (Continued) **1024812866**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:27:51.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SUNGKIM JOHNSTONE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	9547 ROBLIN CT
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758
Owner/Operator Telephone:	916-691-1493
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SUNG KIM
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	9547 ROBLIN CT
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758-1074
Owner/Operator Telephone:	916-691-1493
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

LAKESIDE CLEANERS (Continued) **1024812866**

Historic Generators:

Receive Date:	2005-12-21 00:00:00.0
Handler Name:	LAKESIDE CLEANERS
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	81232
NAICS Description:	DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)

Facility Has Received Notices of Violation:

No Violations Found:

Evaluation Action Summary:

No Evaluations Found:

A9 **FRANCIS M JOVEN D.M.D.** **RCRA NonGen / NLR** **1025870401**
North **9098 LAGUNA MAIN ST STE 6** **CAL000425290**
< 1/8 **ELK GROVE, CA 95758**
0.047 mi.
248 ft. **Site 9 of 10 in cluster A**

Relative:
Higher

Actual:
17 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2017-03-01 00:00:00.0
Handler Name:	FRANCIS M JOVEN D.M.D.
Handler Address:	9098 LAGUNA MAIN ST STE 6
Handler City,State,Zip:	ELK GROVE, CA 95758
EPA ID:	CAL000425290
Contact Name:	FRANCIS M. JOVEN, D.M.D.
Contact Address:	9098 LAGUNA MAIN STREET, SUITE 6
Contact City,State,Zip:	ELK GROVE, CA 95758
Contact Telephone:	916-385-5540
Contact Fax:	916-385-5541
Contact Email:	SLPD119@NETZERO.NET
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	9098 LAGUNA MAIN ST STE 6
Mailing City,State,Zip:	ELK GROVE, CA 95758

FRANCIS M JOVEN D.M.D. (Continued) **1025870401**

Owner Name:	FRANCIS M JOVEN
Owner Type:	Other
Operator Name:	FRANCIS M. JOVEN, D.M.D.
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-10-25 14:16:08.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No

FRANCIS M JOVEN D.M.D. (Continued) **1025870401**

Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: FRANCIS M. JOVEN, D.M.D.
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 9098 LAGUNA MAIN STREET, SUITE 6
Owner/Operator City,State,Zip: ELK GROVE, CA 95758
Owner/Operator Telephone: 916-385-5540
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: FRANCIS M JOVEN
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 9098 LAGUNA MAIN ST STE 6
Owner/Operator City,State,Zip: ELK GROVE, CA 95758
Owner/Operator Telephone: 916-385-5540
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2017-03-01 00:00:00.0
Handler Name: FRANCIS M JOVEN D.M.D.
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 62121
NAICS Description: OFFICES OF DENTISTS

NAICS Code: 621210
NAICS Description: OFFICES OF DENTISTS

Facility Has Received Notices of Violation:

No Violations Found:

Evaluation Action Summary:

FRANCIS M JOVEN D.M.D. (Continued) **1025870401**

No Evaluations Found:

A10 **LAGUNA WEST DENTAL CARE** **Sacramento Co. ML** **S105629186**
North **9098 LAGUNA MAIN ST 8** **N/A**
< 1/8 **ELK GROVE, CA 95758**
0.047 mi.
248 ft. **Site 10 of 10 in cluster A**

Relative: Sacramento Co. ML:
Higher

Name:	LAGUNA WEST DENTAL CARE
Address:	9098 LAGUNA MAIN ST 8
City,State,Zip:	ELK GROVE, CA 95758
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	Not reported
WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

Actual:
17 ft.

---

11 **APPLE, INC** **AST** **A100323050**
NNW **2911 LAGUNA BLVD** **N/A**
< 1/8 **SACRAMENTO, CA**
0.116 mi.
613 ft.

Relative: AST:
Higher

Name:	APPLE, INC
Address:	2911 LAGUNA BLVD
City/Zip:	SACRAMENTO,
Certified Unified Program Agencies:	Sacramento
Owner:	Not reported
Total Gallons:	2,500
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported

Actual:
17 ft.

APPLE, INC (Continued) **A100323050**

Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

B12 **APPLE, INC** **AST** **S111711680**
NW **2911 LAGUNA BLVD BLDG A-C** **N/A**
1/8-1/4 **ELK GROVE, CA 95758**
0.147 mi.
775 ft. **Site 1 of 3 in cluster B**

Relative: **Higher**

Actual: **17 ft.**

AST:

Name:	APPLE, INC
Address:	2911 LAGUNA BLVD BLDG A-C
City/Zip:	ELK GROVE,95758
Certified Unified Program Agencies:	Not reported
Owner:	Apple, Inc.
Total Gallons:	Not reported
CERSID:	10228546
Facility ID:	FA0046204
Business Name:	APPLE, INC
Phone:	(916) 399-7300
Fax:	Not reported
Mailing Address:	2511 Laguna Blvd MS-217 Red
Mailing Address City:	Elk Grove
Mailing Address State:	CA
Mailing Address Zip Code:	95758
Operator Name:	Apple, Inc.
Operator Phone:	916.399.7749
Owner Phone:	916-275-0245
Owner Mail Address:	2511 Laguna Blvd
Owner State:	CA
Owner Zip Code:	95758
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

B13 **APPLE** **RCRA-LQG** **1001023093**
NW **2911 LAGUNA BLVD** **FINDS** **CAR000004457**
1/8-1/4 **ELK GROVE, CA 95758** **ECHO**
0.147 mi. **WDS**
775 ft. **Site 2 of 3 in cluster B**

Relative: **Higher**
Actual: **17 ft.**

RCRA-LQG:

Date Form Received by Agency:	1999-03-04 00:00:00.0
Handler Name:	APPLE COMPUTER
Handler Address:	2911 LAGUNA BLVD
Handler City,State,Zip:	ELK GROVE, CA 95759
EPA ID:	CAR000004457
Contact Name:	BRIAN RAUSCHHUBER
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	916-394-2696
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not reported
Non-Notifier:	Not reported
Biennial Report Cycle:	1997
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2911 LAGUNA BLVD
Mailing City,State,Zip:	ELK GROVE, CA 95759
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	Not reported
Importer Activity:	No
Mixed Waste Generator:	Not reported
Transporter Activity:	Not reported
Transfer Facility Activity:	Not reported
Recycler Activity with Storage:	Not reported
Small Quantity On-Site Burner Exemption:	Not reported
Smelting Melting and Refining Furnace Exemption:	Not reported
Underground Injection Control:	Not reported
Off-Site Waste Receipt:	Not reported
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

APPLE (Continued) **1001023093**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2014-09-16 00:00:00.0
Recognized Trader-Importer:	Not reported
Recognized Trader-Exporter:	Not reported
Importer of Spent Lead Acid Batteries:	Not reported
Exporter of Spent Lead Acid Batteries:	Not reported
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

Historic Generators:

Receive Date:	1996-03-29 00:00:00.0
Handler Name:	APPLE COMPUTER INC. SACRAMENTO
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1999-03-04 00:00:00.0
Handler Name:	APPLE COMPUTER
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported

APPLE (Continued) **1001023093**

Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 334412
NAICS Description: BARE PRINTED CIRCUIT BOARD MANUFACTURING

NAICS Code: 334419
NAICS Description: OTHER ELECTRONIC COMPONENT MANUFACTURING

Facility Has Received Notices of Violation:

No Violations Found:

Evaluation Action Summary:

No Evaluations Found:

FINDS:
Registry ID: 110000785703

Click Here:

Environmental Interest/Information System:
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.
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

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001023093
Registry ID: 110000785703
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110000785703
Name: APPLE COMPUTER
Address: 2911 LAGUNA BLVD
City,State,Zip: ELK GROVE, CA 95758

WDS:
Name: APPLE COMPUTER SACRAMENTO OAS
Address: 2911 LAGUNA BLVD
City: ELK GROVE
Facility ID: 5S 34I011303
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7

APPLE (Continued) **1001023093**

	are assigned by the Regional Board
Subregion:	0
Facility Telephone:	9163942615
Facility Contact:	WILLIAM BRUNSON
Agency Name:	APPLE COMPUTER SACRAMENTO OAS
Agency Address:	PO BOX 785
Agency City,St,Zip:	ELK GROVE 957590785
Agency Contact:	WILLIAM BRUNSON
Agency Telephone:	9163942615
Agency Type:	Private
SIC Code:	3570
SIC Code 2:	Not reported
Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Primary Waste:	STORMS
Waste Type2:	Not reported
Waste2:	Stormwater Runoff
Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

B14 **APPLE, INC** **Sacramento Co. ML** **S125092869**
NW **2911 LAGUNA BLVD BLDG 1-3** **N/A**
1/8-1/4 **ELK GROVE, CA 95758**
0.147 mi.
775 ft. **Site 3 of 3 in cluster B**

Relative: **Higher**
Actual: **17 ft.**

Sacramento Co. ML:

Name:	APPLE, INC
Address:	2911 LAGUNA BLVD BLDG 1-3
City,State,Zip:	ELK GROVE, CA 95758
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	A

APPLE, INC (Continued) **S125092869**

Billing Codes UST:	Not reported
WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

15
NW
1/8-1/4
0.190 mi.
1003 ft.

PEGATRON
2811 LAGUNA BLVD
ELK GROVE, CA 95758

RCRA-SQG **1024089783**
CAR000278168

Relative:
Higher

Actual:
17 ft.

RCRA-SQG:

Date Form Received by Agency:	2017-12-12 00:00:00.0
Handler Name:	PEGATRON
Handler Address:	2811 LAGUNA BLVD
Handler City,State,Zip:	ELK GROVE, CA 95758
EPA ID:	CAR000278168
Contact Name:	SUNG HAN
Contact Address:	LAGUNA BLVD
Contact City,State,Zip:	ELK GROVE, CA 95758
Contact Telephone:	931-207-6778
Contact Fax:	Not reported
Contact Email:	SUNG_HAN@PEGATRONCORP.COM
Contact Title:	MANGER
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	LAGUNA BLVD
Mailing City,State,Zip:	ELK GROVE, CA 95758
Owner Name:	APPLE, INC.
Owner Type:	Private
Operator Name:	PEGATRON
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No

PEGATRON (Continued) **1024089783**

Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	Yes
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2017-12-12 19:44:28.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	Not reported

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE

Handler - Owner Operator:

PEGATRON (Continued) **1024089783**

Owner/Operator Indicator:	Operator
Owner/Operator Name:	PEGATRON
Legal Status:	Private
Date Became Current:	2017-12-04 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	2811 LAGUNA BLVD
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	SUNG_HAN@PEGATRONCORP.COM

Owner/Operator Indicator:	Owner
Owner/Operator Name:	APPLE, INC.
Legal Status:	Private
Date Became Current:	2017-12-04 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	2811 LAGUNA BLVD
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	SUNG_HAN@PEGATRONCORP.COM

Historic Generators:

Receive Date:	2017-12-12 00:00:00.0
Handler Name:	PEGATRON
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	334220
NAICS Description:	RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

Facility Has Received Notices of Violation:

No Violations Found:

Evaluation Action Summary:

No Evaluations Found:

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ELK GROVE	S121649635	LAGUNA WEST RETAIL SHOPS	LAGUNA BLVD AND LAGUNA MAIN ST	95758	CIWQS
SACRAMENTO	S121649636	LAGUNA WEST RETAIL SHOPS	LAGUNA BLVD AND LAGUNA MAIN ST	95758	CIWQS

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: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

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: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 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: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly 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: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/25/2021
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: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/15/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 30

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
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: 08/24/2020
Next Scheduled EDR Contact: 12/07/2020
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: 08/24/2020
Next Scheduled EDR Contact: 12/07/2020
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: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an 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: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST 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 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

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

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: 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: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

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

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

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

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

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

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 02/01/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
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: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

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

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

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

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

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
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

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

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: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
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: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
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: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
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: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
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: 07/31/2020
Next Scheduled EDR Contact: 11/09/2020
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: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
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: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2019
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 01/18/2021
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: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
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: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
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: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 05/20/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/06/2020
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 12/07/2020
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: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

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

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
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: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

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

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/23/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 86

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

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

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

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

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

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

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 69

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/13/2020
Next Scheduled EDR Contact: 11/30/2020
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: 10/13/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/05/2020
Next Scheduled EDR Contact: 11/23/2020
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: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
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: 07/31/2020
Next Scheduled EDR Contact: 11/16/2020
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: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
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: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
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: 08/14/2020
Next Scheduled EDR Contact: 11/30/2020
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: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
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: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 12/14/2020
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: 07/24/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/14/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
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: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 11/16/2020
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: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
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: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

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

Date of Government Version: 04/09/2009
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: 08/05/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 59

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 01/31/2021
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
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: 09/04/2020
Next Scheduled EDR Contact: 12/14/2020
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: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
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: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
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: 09/24/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

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

Date of Government Version: 10/19/2006
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: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
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: 06/30/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
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: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

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

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

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

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 08/21/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

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

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

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

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

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

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2020
Date Data Arrived at EDR: 05/21/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

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

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 77

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
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: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
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: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 12/21/2020
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: 02/03/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 86

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

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

Date of Government Version: 05/31/2018
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: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/27/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

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

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 65

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 11/30/2020
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: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/14/2020
Next Scheduled EDR Contact: 11/23/2020
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: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
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: 06/04/2020
Date Data Arrived at EDR: 06/05/2020
Date Made Active in Reports: 08/17/2020
Number of Days to Update: 73

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/24/2020
Next Scheduled EDR Contact: 12/14/2020
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: 08/19/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 14

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 12/07/2020
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: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
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: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/05/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

ICE: ICE

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

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 73

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 11/30/2020
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: 05/18/2020
Date Data Arrived at EDR: 05/18/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 74

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 11/30/2020
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: 07/06/2020
Date Data Arrived at EDR: 07/07/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 05/28/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/12/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/28/2020
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/10/2020
Next Scheduled EDR Contact: 11/23/2020
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: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 08/21/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 08/27/2020
Number of Days to Update: 6
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 08/20/2020
Next Scheduled EDR Contact: 12/28/2020
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: 06/06/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
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: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
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: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
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: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

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

Non-Case Information sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

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

Other Oil & Gas Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 04/09/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
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: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

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: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 13

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/17/2020
Date Data Arrived at EDR: 06/18/2020
Date Made Active in Reports: 09/02/2020
Number of Days to Update: 76

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 07/16/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

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

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

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

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

FRESNO COUNTY:

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

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 78

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/19/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 26

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
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: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/14/2020
Number of Days to Update: 76

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/21/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 71

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
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: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/10/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 80

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/13/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 78

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
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: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
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: 10/12/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020
Date Data Arrived at EDR: 04/14/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 78

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
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: 10/05/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/30/2020
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: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 1

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 05/15/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

MONTEREY COUNTY:

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

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

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
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: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 06/10/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Annually

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

Date of Government Version: 07/02/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Quarterly

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

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 11/16/2020
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: 06/08/2020
Date Data Arrived at EDR: 06/10/2020
Date Made Active in Reports: 08/24/2020
Number of Days to Update: 75

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
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: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/10/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/10/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
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: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
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: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
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: 09/11/2020
Next Scheduled EDR Contact: 12/21/2020
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: 09/01/2020
Next Scheduled EDR Contact: 12/21/2020
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: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/08/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
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: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2020
Date Data Arrived at EDR: 07/31/2020
Date Made Active in Reports: 10/16/2020
Number of Days to Update: 77

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
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: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
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: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 09/16/2020
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/07/2020
Date Data Arrived at EDR: 07/08/2020
Date Made Active in Reports: 09/25/2020
Number of Days to Update: 79

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
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: 10/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 77

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

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

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/06/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 81

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
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: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
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: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
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: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
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: 06/23/2020
Date Data Arrived at EDR: 06/29/2020
Date Made Active in Reports: 09/15/2020
Number of Days to Update: 78

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/07/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 80

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/12/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 11/23/2020
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: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/09/2020
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: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
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: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
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: 09/02/2020
Next Scheduled EDR Contact: 12/21/2020
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.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

LAGUNA APARTMENTS
3000 VAUX AVE
ELK GROVE, CA 95758

TARGET PROPERTY COORDINATES

Latitude (North):	38.425891 - 38° 25' 33.21''
Longitude (West):	121.470123 - 121° 28' 12.44''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	633545.6
UTM Y (Meters):	4253972.0
Elevation:	17 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5619710 FLORIN, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

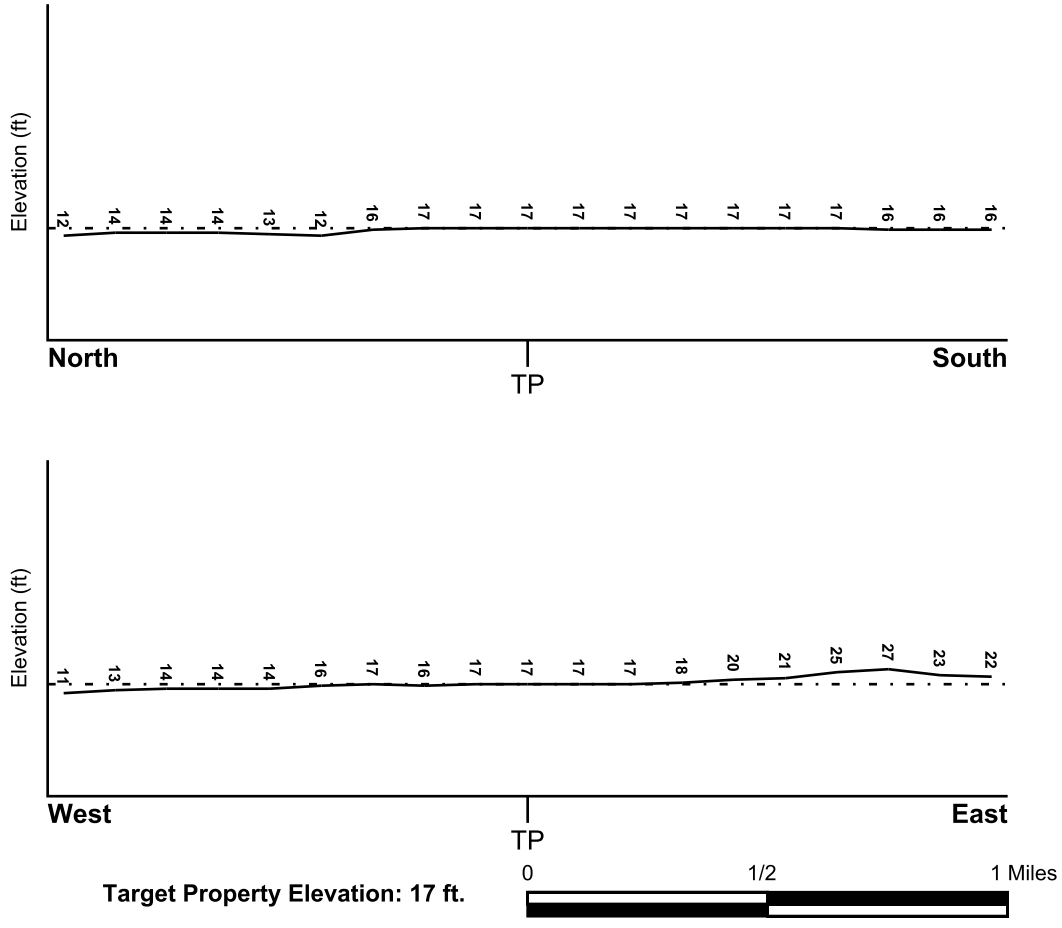
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06067C0315H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06067C0305H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
FLORIN	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

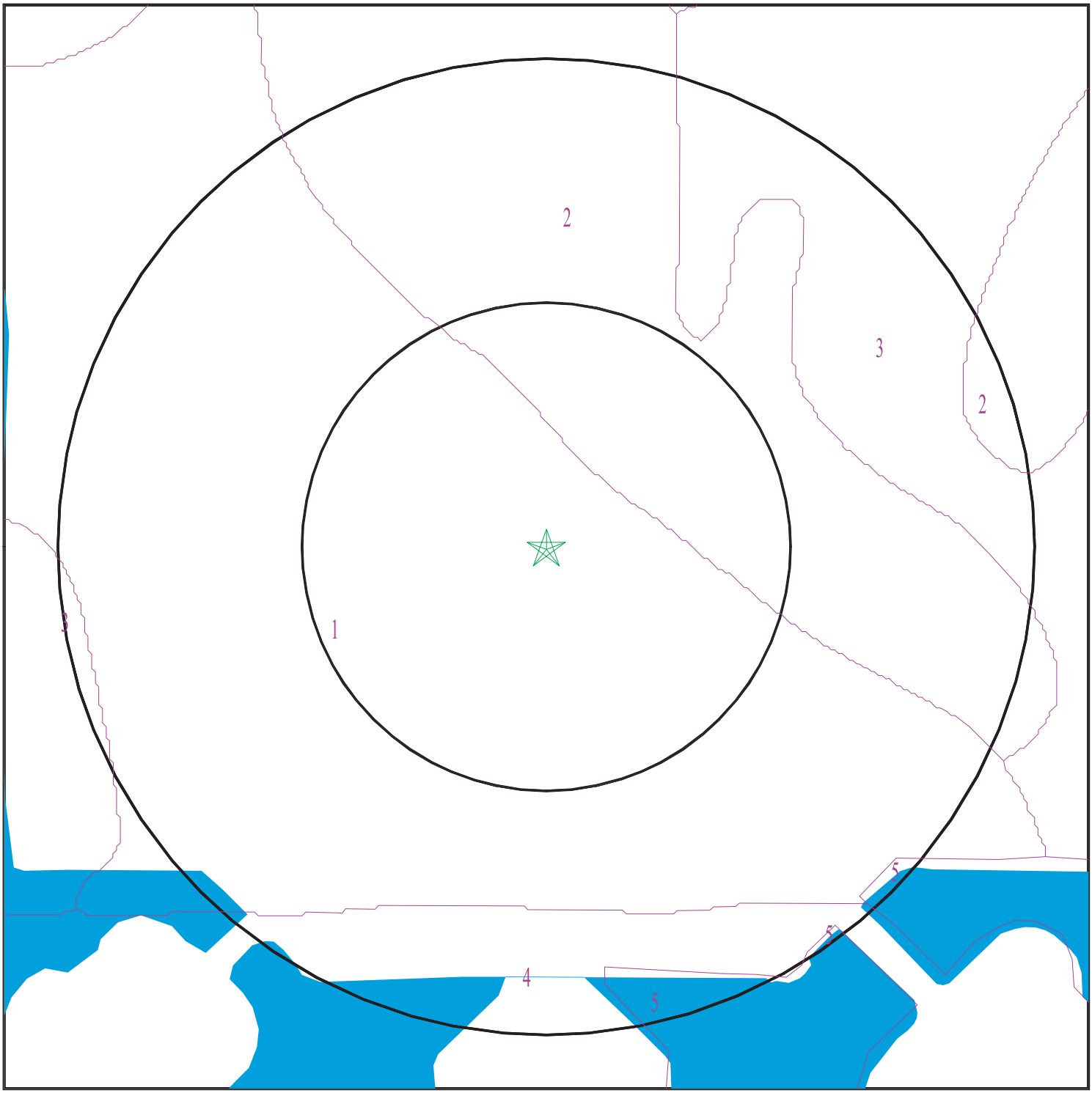
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6242735.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Laguna Apartments	CLIENT:	Youngdahl Consulting Group
ADDRESS:	3000 Vaux Ave Elk Grove CA 95758	CONTACT:	Dennis Eck
		INQUIRY #:	6242735.2s
LAT/LONG:	38.425891 / 121.470123	DATE:	October 27, 2020 12:22 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

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

Soil Map ID: 1

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

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

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	22 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	27 inches	53 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	53 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

Soil Map ID: 2

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

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

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	22 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	27 inches	53 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
4	53 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

Soil Map ID: 3

Soil Component Name: GALT

Soil Surface Texture: clay

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

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	12 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	31 inches	59 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

Soil Map ID: 4

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

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

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	14 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	20 inches	46 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
4	46 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

Soil Map ID: 5

Soil Component Name: Water

Soil Surface Texture: silt loam

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

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000188236	1/4 - 1/2 Mile SSW
B4	USGS40000188235	1/2 - 1 Mile SE
C5	USGS40000188286	1/2 - 1 Mile ENE
C6	USGS40000188287	1/2 - 1 Mile ENE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

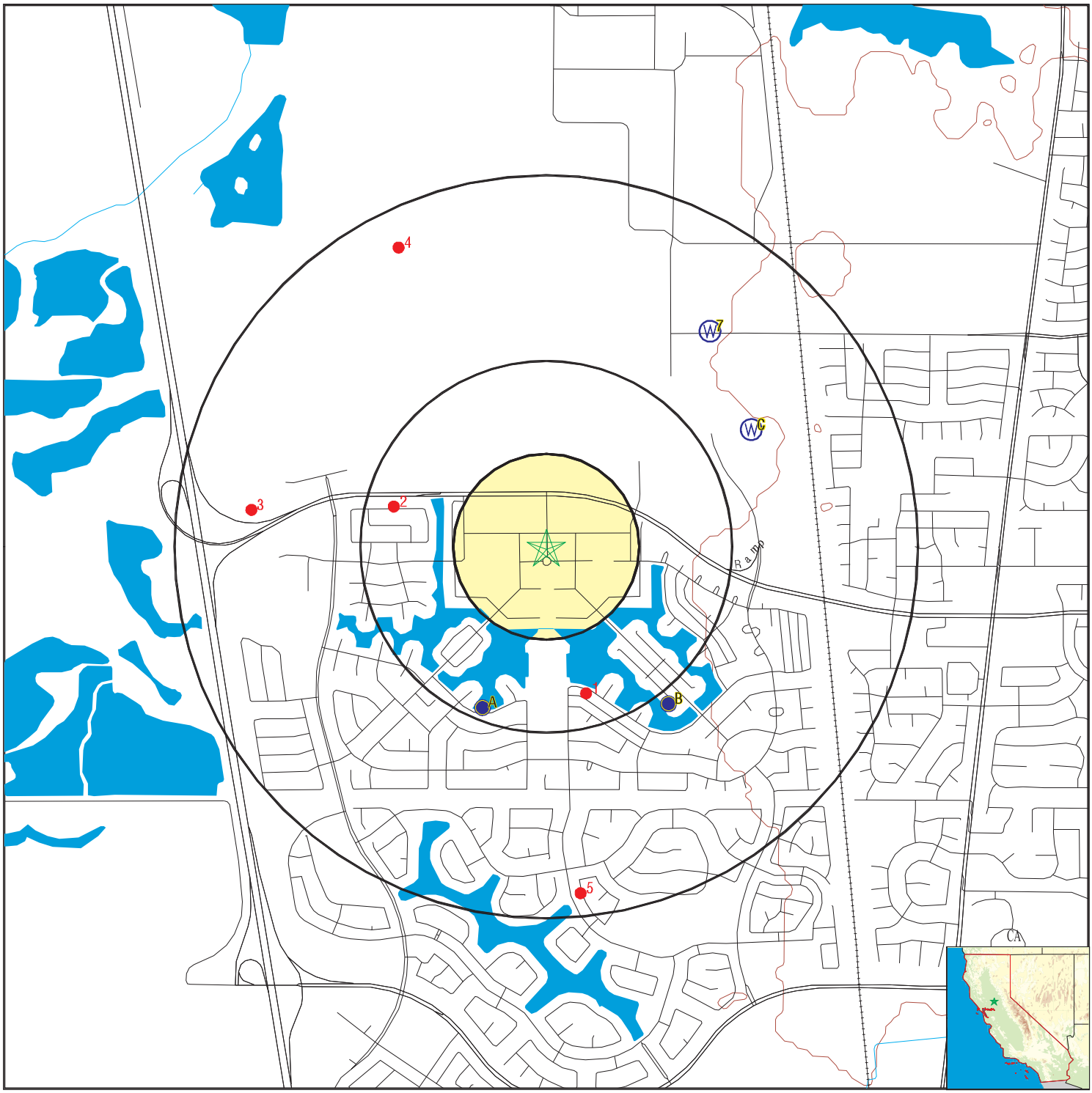
MAP ID	WELL ID	LOCATION FROM TP
A1	CADWR8000037942	1/4 - 1/2 Mile SSW
B3	CADWR8000037944	1/2 - 1 Mile SE
7	CADWR8000037982	1/2 - 1 Mile NE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG13000007987	1/4 - 1/2 Mile SSE
2	CAOG13000008058	1/4 - 1/2 Mile WNW
3	CAOG13000008061	1/2 - 1 Mile West
4	CAOG13000007986	1/2 - 1 Mile NNW
5	CAOG13000215378	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 6242735.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

N

SITE NAME:	Laguna Apartments	CLIENT:	Youngdahl Consulting Group
ADDRESS:	3000 Vaux Ave Elk Grove CA 95758	CONTACT:	Dennis Eck
		INQUIRY #:	6242735.2s
LAT/LONG:	38.425891 / 121.470123	DATE:	October 27, 2020 12:22 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
SSW
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR8000037942**

State Well #:	07N05E31C001M	Station ID:	6722
Well Name:	Not Reported	Well Use:	Irrigation
Well Type:	Unknown	Well Depth:	252
Basin Name:	South American	Well Completion Rpt #:	37177

A2
SSW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000188236**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N005E31C001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Continental Deposits (Pleistocene-Pliocene)		
Aquifer Type:	Not Reported	Construction Date:	19770101
Well Depth:	252	Well Depth Units:	ft
Well Hole Depth:	277	Well Hole Depth Units:	ft

B3
SE
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000037944**

State Well #:	07N05E32D001M	Station ID:	27318
Well Name:	Not Reported	Well Use:	Irrigation
Well Type:	Unknown	Well Depth:	610
Basin Name:	South American	Well Completion Rpt #:	37174

B4
SE
1/2 - 1 Mile
Higher

FED USGS **USGS40000188235**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N005E32D001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19770101	Well Depth:	575
Well Depth Units:	ft	Well Hole Depth:	600
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1977-01-01
Feet below surface:	60.00	Feet to sea level:	Not Reported
Note:	Not Reported		

C5
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000188286**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N005E29M001M	Type:	Well
Description:	DEEPER OF TWO PIEZOMETERS IN ONE HOLE		
HUC:	18020109	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Not Reported	Aquifer Type:	Confined single aquifer
Construction Date:	19900913	Well Depth:	644
Well Depth Units:	ft	Well Hole Depth:	646
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	16	Level reading date:	1991-09-05
Feet below surface:	62.61	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1991-07-02	Feet below surface:	60.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-05-31	Feet below surface:	58.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-30	Feet below surface:	58.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-03-22	Feet below surface:	56.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	58.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-01-03	Feet below surface:	56.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-28	Feet below surface:	57.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-20	Feet below surface:	57.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-15	Feet below surface:	58.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-08	Feet below surface:	58.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-29	Feet below surface:	58.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-14	Feet below surface:	58.63
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1990-10-01	Feet below surface:	58.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-24	Feet below surface:	59.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-18	Feet below surface:	59.51
Feet to sea level:	Not Reported	Note:	Not Reported

C6
ENE **FED USGS** **USGS40000188287**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N005E29M002M	Type:	Well
Description:	SHALLOWER OF TWO PIEZOMETERS IN ONE HOLE		
HUC:	18020109	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Not Reported	Aquifer Type:	Confined single aquifer
Construction Date:	19900913	Well Depth:	644
Well Depth Units:	ft	Well Hole Depth:	646
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	16	Level reading date:	1991-09-05
Feet below surface:	57.74	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1991-07-02	Feet below surface:	56.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-05-31	Feet below surface:	56.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-30	Feet below surface:	55.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-03-22	Feet below surface:	55.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	55.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-01-03	Feet below surface:	53.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-28	Feet below surface:	54.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-20	Feet below surface:	55.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-15	Feet below surface:	55.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-08	Feet below surface:	55.38
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1990-10-29	Feet below surface:	55.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-14	Feet below surface:	56.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-01	Feet below surface:	58.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-24	Feet below surface:	55.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-18	Feet below surface:	56.09
Feet to sea level:	Not Reported	Note:	Not Reported

7
NE
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000037982**

State Well #:	07N05E29D001M	Station ID:	27205
Well Name:	SCGA #3	Well Use:	Irrigation
Well Type:	Single Well	Well Depth:	170
Basin Name:	South American	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
SSE **OIL_GAS** **CAOG13000007987**
1/4 - 1/2 Mile

API #:	0406700319	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Paul E. Berry	Lease Name:	Berry
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	12/10/1965

2
WNW **OIL_GAS** **CAOG13000008058**
1/4 - 1/2 Mile

API #:	0406720044	Well #:	2
Well Status:	Plugged	Well Type:	DH
Operator Name:	Norris Oil Company	Lease Name:	Giberson et al
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	05/26/1971

3
West **OIL_GAS** **CAOG13000008061**
1/2 - 1 Mile

API #:	0406720048	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Norris Oil Company	Lease Name:	Weagant and Tilbury
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	10/16/1971

4
NNW **OIL_GAS** **CAOG13000007986**
1/2 - 1 Mile

API #:	0406700318	Well #:	A-1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Occidental Petroleum Corporation		
Lease Name:	Freeport Unit	Field Name:	Any Field
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
SPUD Date:	09/30/1960		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

5
South
1/2 - 1 Mile

OIL_GAS **CAOG13000215378**

API #:	0406720080	Well #:	2
Well Status:	Plugged	Well Type:	GAS
Operator Name:	Atlantic Oil Company	Lease Name:	Elliott Ranch
Field Name:	Stone Lake Gas (ABD)	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	11/07/1974

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95758	21	1

Federal EPA Radon Zone for SACRAMENTO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SACRAMENTO COUNTY, CA

Number of sites tested: 52

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.665 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	8.350 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D
EDR Vapor Encroachment Screen

Laguna Apartments
3000 Vaux Ave
Elk Grove, CA 95758

Inquiry Number: 6242735.2s
November 6, 2020

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

EDR® Environmental Data Resources Inc

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

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Default Area of Concern (Miles)*	property	1/10	> 1/10
Federal NPL site list	1.0	0	0	0
Federal Delisted NPL site list	1.0	0	0	0
Federal CERCLIS list	0.5	0	0	0
Federal CERCLIS NFRAP site list	0.5	0	0	0
Federal RCRA CORRACTS facilities list	1.0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list	0.5	0	0	0
Federal RCRA generators list	0.25	0	0	0
Federal institutional controls / engineering controls registries	0.5	0	0	0
Federal ERNS list	0.001	0	0	-
State- and tribal - equivalent NPL	1.0	0	0	0
State- and tribal - equivalent CERCLIS	1.0	0	0	0
State and tribal landfill and/or solid waste disposal site lists	0.5	0	0	0
State and tribal leaking storage tank lists	0.5	0	0	0
State and tribal registered storage tank lists	0.25	0	0	0
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.5	0	0	0
State and tribal Brownfields sites	0.5	0	0	0

ADDITIONAL ENVIRONMENTAL RECORDS				
Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	1.0	0	0	0
Local Lists of Registered Storage Tanks	0.25	0	0	0
Local Land Records	0.5	0	0	0
Records of Emergency Release Reports	0.5	0	0	0
Other Ascertainable Records	1.0	0	3	0

EDR HIGH RISK HISTORICAL RECORDS				
EDR Exclusive Records	1.0	0	2	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	2	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

LAGUNA APARTMENTS
3000 VAUX AVE
ELK GROVE, CA 95758

COORDINATES

Latitude (North):	38.425891 - 38° 25′ 33.210754″
Longitude (West):	121.470123 - 121° 28′ 12.443848″
Elevation:	17 ft. above sea level

EXECUTIVE SUMMARY

SEARCH RESULTS

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

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

ADDITIONAL ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
LAKESIDE CLEANERS HWTS: HWTS Sacramento Co. ML: Sacramento Co. ML DRYCLEANERS: DRYCLEANERS	9098 LAGUNA MAIN ST STE 2	<1/10 N	▲ A2	8
LAKESIDE CLEANERS CERS: CERS Sacramento Co. ML: Sacramento Co. ML	9098 LAGUNA MAIN STREET #2	<1/10 N	▲ A3	10
LAKESIDE CLEANERS RCRA NonGen / NLR: RCRA NonGen / NLR	9098 LAGUNA MAIN ST STE 2	<1/10 N	▲ A5	12

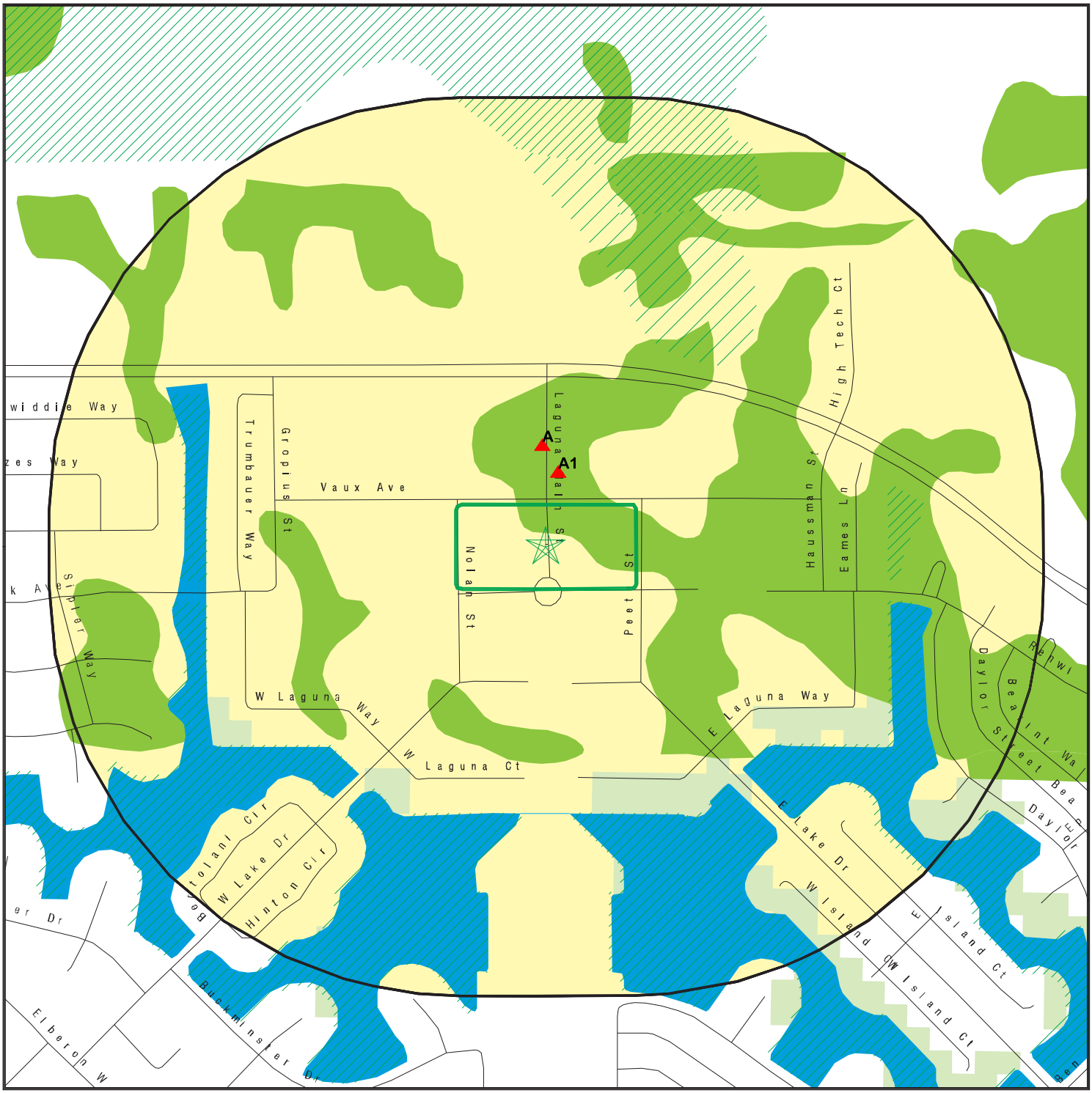
EDR HIGH RISK HISTORICAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
LAKESIDE CLEANERS EDR Hist Cleaner: EDR Hist Cleaner	9097 LAGUNA MAIN ST STE 2	<1/10 N	▲ A1	8
LAKESIDE CLEANERS EDR Hist Cleaner: EDR Hist Cleaner	9098 LAGUNA MAIN ST STE 2	<1/10 N	▲ A4	11

EDR RECOVERED GOVERNMENT ARCHIVES

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

PRIMARY MAP - 6242735.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 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:	Laguna Apartments	CLIENT:	Youngdahl Consulting Group
ADDRESS:	3000 Vaux Ave Elk Grove CA 95758	CONTACT:	Dennis Eck
		INQUIRY #:	6242735.2s
LAT/LONG:	38.425891 / 121.470123	DATE:	October 27, 2020 12:21 pm

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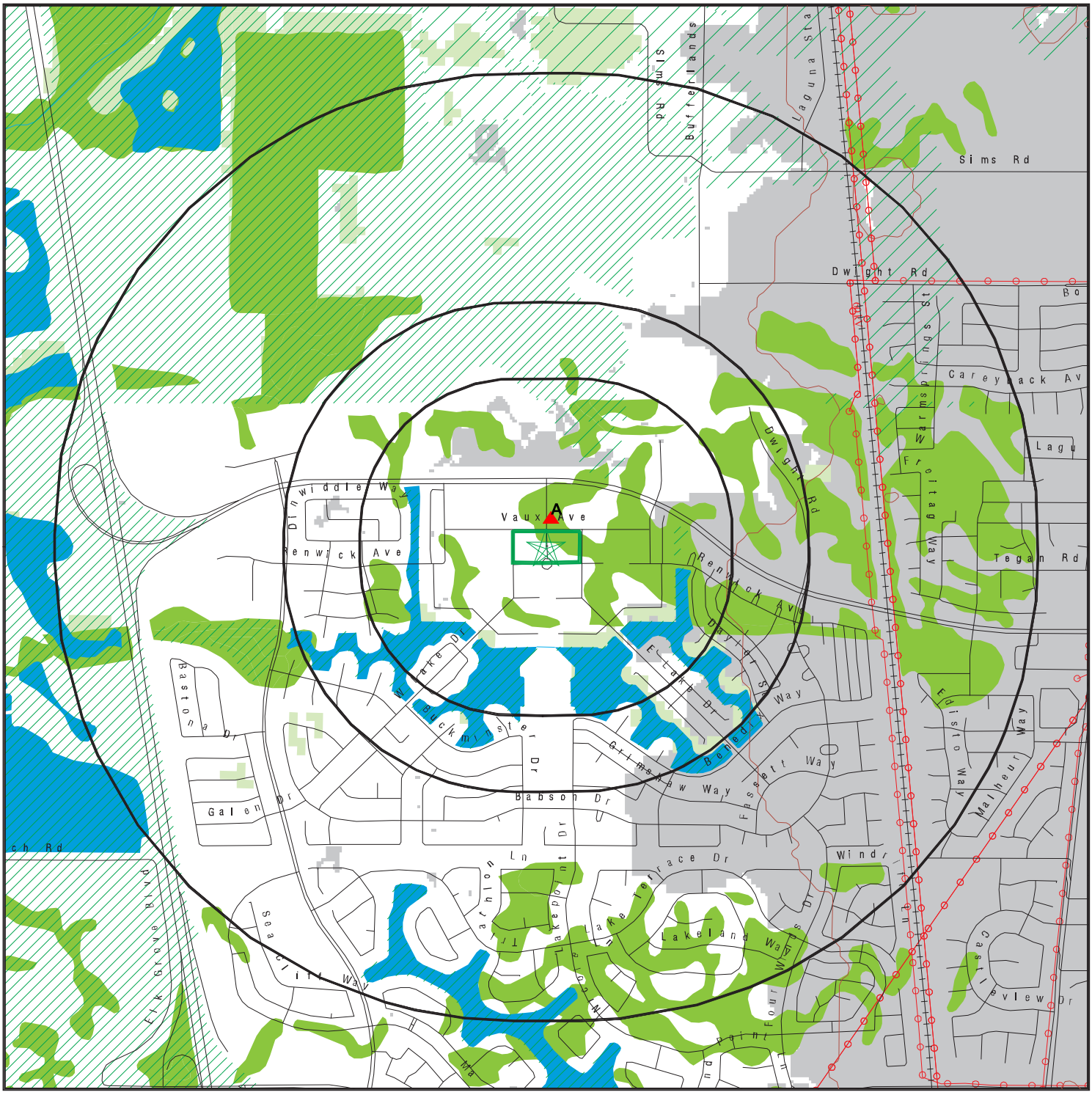
SECONDARY MAP - 6242735.2S



0 1/3 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- 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: Laguna Apartments ADDRESS: 3000 Vaux Ave Elk Grove CA 95758 LAT/LONG: 38.425891 / 121.470123	CLIENT: Youngdahl Consulting Group CONTACT: Dennis Eck INQUIRY #: 6242735.2s DATE: October 27, 2020 12:20 pm

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MAP FINDINGS

LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**		EDR SITE ID NUMBER
◆ **MAP ID#**	Direction Distance Range (Distance feet / miles) Relative Elevation Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.

Worksheet:

Comments:
Comments may be added on the online Vapor Encroachment Worksheet.

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

LAKESIDE CLEANERS 9097 LAGUNA MAIN ST STE 2, ELK GROVE, CA, 95758			1020023739
▲ A1	N <1/10	(133 ft. / 0.025 mi.)	EDR Exclusive Records
	Equal Elevation	17 ft. Above Sea Level	

Worksheet:

EDR Hist Cleaner: EDR Exclusive Records

Year:	Name: / Type:
1998:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
1999:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2000:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2001:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2002:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2003:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2004:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2005:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs

LAKESIDE CLEANERS 9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA, 957587449			S108541002
▲ A2	N <1/10	(248 ft. / 0.047 mi.)	Other Ascertainable Records
	Equal Elevation	17 ft. Above Sea Level	

Worksheet:

DRYCLEANERS: Other Ascertainable Records

Name:	LAKESIDE CLEANERS
Address:	9098 LAGUNA MAIN ST STE 2
City,State,Zip:	ELK GROVE, CA 957587449

LAKESIDE CLEANERS, 9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA 957587449 (Continued)

EPA Id:	CAL000301611
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	12/21/2005
Facility Active:	Yes
Inactive Date:	Not Reported
Facility Addr2:	Not Reported
Owner Name:	SUNG KIM
Owner Address:	9547 ROBLIN CT
Owner Address 2:	Not Reported
Owner Telephone:	9166911493
Contact Name:	SUNGKIM
Contact Address:	9547 ROBLIN CT
Contact Address 2:	9098 LAGUNA MAIN ST
Contact Telephone:	9166911493
Mailing Name:	Not Reported
Mailing Address 1:	9098 LAGUNA MAIN ST STE 2
Mailing Address 2:	Not Reported
Mailing City:	ELK GROVE
Mailing State:	CA
Mailing Zip:	957587449
Owner Fax:	0
Region Code:	1

Sacramento Co. ML: Other Ascertainable Records

Name:	LAKE SIDE CLEANERS
Address:	9098 LAGUNA MAIN ST STE 2
City,State,Zip:	ELK GROVE, CA 95758
Facility Id:	Not Reported
Facility Status:	Not Reported
FD:	Not Reported
Billing Codes BP:	A
Billing Codes UST:	Not Reported
WG Bill Code:	Not Reported
Target Property Bill Cod:	Not Reported
Food Bill Code:	Not Reported
CUPA Permit Date:	Not Reported
HAZMAT Permit Date:	Not Reported
HAZMAT Inspection Date:	Not Reported
Hazmat Date BP Received:	Not Reported
UST Permit Dt:	Not Reported
UST Inspection Date:	Not Reported
UST Tank Test Date:	Not Reported
Number of Tanks:	Not Reported
UST Tank Test Date:	Not Reported
SIC Code:	Not Reported
Tier Permitting:	Not Reported

LAKESIDE CLEANERS, 9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA 957587449 (Continued)

AST Bill Code:	Not Reported
CALARP Bill Code:	Not Reported

HWTS: Other Ascertainable Records

Name:	LAKESIDE CLEANERS
Address:	9098 LAGUNA MAIN ST STE 2
Address 2:	Not Reported
City,State,Zip:	ELK GROVE, CA 957587449
EPA ID:	CAL000301611
Inactive Date:	Not Reported
Create Date:	12/21/2005
Last Act Date:	09/13/2019
Mailing Name:	Not Reported
Mailing Address:	9098 LAGUNA MAIN ST STE 2
Mailing Address 2:	Not Reported
Mailing City,State,Zip:	ELK GROVE, CA 957587449
Owner Name:	SUNG KIM
Owner Address:	9547 ROBLIN CT
Owner Address 2:	Not Reported
Owner City,State,Zip:	ELK GROVE, CA 957581074
Contact Name:	SUNGKIM
Contact Address:	9547 ROBLIN CT
Contact Address 2:	9098 LAGUNA MAIN ST
City,State,Zip:	ELK GROVE, CA 95758

NAICS:

EPA ID:	CAL000301611
Create Date:	2005-12-21 10:44:36
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
Issued EPA ID Date:	2005-12-21 10:44:36
Inactive Date:	Not Reported
Facility Name:	LAKESIDE CLEANERS
Facility Address:	9098 LAGUNA MAIN ST STE 2
Facility Address 2:	Not Reported
Facility City:	ELK GROVE
Facility County:	34
Facility State:	CA
Facility Zip:	957587449

LAKESIDE CLEANERS 9098 LAGUNA MAIN STREET #2, ELK GROVE, CA, 95758			S110041628
▲ A3	N <1/10	(248 ft. / 0.047 mi.)	Other Ascertainable Records
	Equal Elevation	17 ft. Above Sea Level	

Worksheet:

LAKESIDE CLEANERS, 9098 LAGUNA MAIN STREET #2, ELK GROVE, CA 95758 (Continued)

Sacramento Co. ML: Other Ascertainable Records

Name:	LAKE SIDE CLEANERS
Address:	9098 LAGUNA MAIN ST
City,State,Zip:	LAGUN, CA 95758
Facility Id:	Not Reported
Facility Status:	Inactive. Included on a listing no longer updated.
FD:	Not Reported
Billing Codes BP:	Disclaimer
Billing Codes UST:	No Tanks
WG Bill Code:	Oil Changed by Outside Company-No Fee
Target Property Bill Cod:	50
Food Bill Code:	50
CUPA Permit Date:	Not Reported
HAZMAT Permit Date:	Not Reported
HAZMAT Inspection Date:	Not Reported
Hazmat Date BP Received:	Not Reported
UST Permit Dt:	Not Reported
UST Inspection Date:	Not Reported
UST Tank Test Date:	Not Reported
Number of Tanks:	0
UST Tank Test Date:	Not Reported
SIC Code:	7216
Tier Permitting:	Not Reported
AST Bill Code:	Not Reported
CALARP Bill Code:	Not Reported

CERS: Other Ascertainable Records

Name:	LAKESIDE CLEANERS
Address:	9098 LAGUNA MAIN STREET #2
City,State,Zip:	ELK GROVE, CA 95758
Site ID:	476767
CERS ID:	110017420129
CERS Description:	US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc:	Public Contact
Entity Name:	KIL ROK KIM
Entity Title:	Not Reported
Affiliation Address:	9098 LAGUNA MAIN ST 2
Affiliation City:	ELKGROVE
Affiliation State:	CA
Affiliation Country:	Not Reported
Affiliation Zip:	Not Reported
Affiliation Phone:	Not Reported

LAKESIDE CLEANERS
9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA, 95758 1020023740

▲ A4	N <1/10	(248 ft. / 0.047 mi.)	EDR Exclusive Records
	Equal Elevation	17 ft. Above Sea Level	

Worksheet:

EDR Hist Cleaner: EDR Exclusive Records

Year:	Name: / Type:
2006:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2007:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2008:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2009:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2010:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2011:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2012:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2013:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs
2014:	LAKESIDE CLEANERS / Drycleaning Plants, Except Rugs

LAKESIDE CLEANERS
9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA, 95758-7449 1024812866

▲ A5	N <1/10	(248 ft. / 0.047 mi.)	Other Ascertainable Records
	Equal Elevation	17 ft. Above Sea Level	

Worksheet:

RCRA NonGen / NLR: Other Ascertainable Records

Date Form Received by Agency:	2005-12-21 00:00:00.0
Handler Name:	LAKESIDE CLEANERS
Handler Address:	9098 LAGUNA MAIN ST STE 2
Handler City,State,Zip:	ELK GROVE, CA 95758-7449
EPA ID:	CAL000301611
Contact Name:	SUNGKIM JOHNSTONE
Contact Address:	9547 ROBLIN CT
Contact City,State,Zip:	ELK GROVE, CA 95758
Contact Telephone:	916-691-1493
Contact Fax:	916-691-1493
Contact Email:	SUNGYEO2275@GMAIL.COM
Contact Title:	Not Reported
EPA Region:	09
Land Type:	Not Reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not Reported
Biennial Report Cycle:	Not Reported
Accessibility:	Not Reported
Active Site Indicator:	Handler Activities
State District Owner:	Not Reported
State District:	Not Reported
Mailing Address:	9098 LAGUNA MAIN ST STE 2

LAKESIDE CLEANERS, 9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA 95758-7449 (Continued)

Mailing City,State,Zip:	ELK GROVE, CA 95758-7449
Owner Name:	SUNG KIM
Owner Type:	Other
Operator Name:	SUNGKIM JOHNSTONE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not Reported
Active Site Converter Treatment storage and Disposal Facility:	Not Reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not Reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not Reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not Reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not Reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not Reported
Permit Workload Universe:	Not Reported
Permit Progress Universe:	Not Reported
Post-Closure Workload Universe:	Not Reported
Closure Workload Universe:	Not Reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

LAKESIDE CLEANERS, 9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA 95758-7449 (Continued)

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not Reported
Full Enforcement Universe:	Not Reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not Reported
Handler Date of Last Change:	2018-09-05 20:27:51.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SUNGKIM JOHNSTONE
Legal Status:	Other
Date Became Current:	Not Reported
Date Ended Current:	Not Reported
Owner/Operator Address:	9547 ROBLIN CT
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758
Owner/Operator Telephone:	916-691-1493
Owner/Operator Telephone Ext:	Not Reported
Owner/Operator Fax:	Not Reported
Owner/Operator Email:	Not Reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SUNG KIM
Legal Status:	Other
Date Became Current:	Not Reported
Date Ended Current:	Not Reported
Owner/Operator Address:	9547 ROBLIN CT
Owner/Operator City,State,Zip:	ELK GROVE, CA 95758-1074
Owner/Operator Telephone:	916-691-1493
Owner/Operator Telephone Ext:	Not Reported
Owner/Operator Fax:	Not Reported
Owner/Operator Email:	Not Reported

Historic Generators:

Receive Date:	2005-12-21 00:00:00.0
Handler Name:	LAKESIDE CLEANERS

LAKESIDE CLEANERS, 9098 LAGUNA MAIN ST STE 2, ELK GROVE, CA 95758-7449 (Continued)

Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not Reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not Reported
Electronic Manifest Broker:	Not Reported

List of NAICS Codes and Descriptions:

NAICS Code:	81232
NAICS Description:	DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)

Facility Has Received Notices of Violation:

No Violations Found:

Evaluation Action Summary:

No Evaluations Found:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
ENVIRONMENTAL RECORDS						
Federal NPL site list						
US	NPL	National Priority List	EPA	07/29/2020	08/03/2020	08/25/2020
US	Proposed NPL	Proposed National Priority List Sites	EPA	07/29/2020	08/03/2020	08/25/2020
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
Federal CERCLIS list						
US	SEMS	Superfund Enterprise Management System	EPA	07/29/2020	08/03/2020	08/25/2020
Federal RCRA CORRACTS facilities list						
US	CORRACTS	Corrective Action Report	EPA	06/15/2020	06/22/2020	09/17/2020
Federal RCRA TSD facilities list						
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
Federal RCRA generators list						
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
Federal institutional controls / engineering controls registries						
US	LUCIS	Land Use Control Information System	Department of the Navy	05/15/2020	05/19/2020	06/18/2020
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	02/13/2020	02/20/2020	05/15/2020
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	02/13/2020	02/20/2020	05/15/2020
Federal ERNS list						
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/15/2020	06/22/2020	09/17/2020
State and tribal - equivalent NPL						
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
State and tribal - equivalent CERCLIS						
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
State and tribal landfill / solid waste disposal						
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	05/11/2020	05/12/2020	07/27/2020
State and tribal leaking storage tank lists						
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/08/2020	05/20/2020	08/12/2020
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/15/2020	05/20/2020	08/12/2020
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
State and tribal registered storage tank lists						
CA	UST	Active UST Facilities	SWRCB	06/08/2020	06/09/2020	08/20/2020
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	05/26/2020	06/09/2020	08/20/2020
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	05/20/2020	05/20/2020	08/06/2020
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/03/2020	05/20/2020	08/12/2020
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/08/2020	05/20/2020	08/12/2020
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/13/2020
US	FEMA UST	Underground Storage Tank Listing	FEMA	02/01/2020	03/19/2020	06/09/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
State and tribal voluntary cleanup sites						
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
State and tribal Brownfields sites						
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	06/22/2020	06/22/2020	09/04/2020
Other Records						
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	06/30/2020	07/15/2020	07/21/2020
US	ROD	Records Of Decision	EPA	07/29/2020	08/03/2020	08/25/2020
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	07/29/2020	08/03/2020	08/25/2020
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
CA	SWRCY	Recycler Database	Department of Conservation	06/08/2020	06/09/2020	08/19/2020
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	08/03/2020	08/05/2020	10/22/2020
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	07/29/2020	08/03/2020	08/25/2020
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2018	12/04/2019	01/15/2020
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	06/15/2020	06/22/2020	09/10/2020
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	Delisted NPL	National Priority List Deletions	EPA	07/29/2020	08/03/2020	08/25/2020
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	07/29/2020	08/03/2020	08/25/2020
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	06/22/2020	06/23/2020	09/17/2020
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	06/01/2020	06/02/2020	06/09/2020
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	08/05/2020	08/13/2020	10/21/2020
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	05/01/2020	05/21/2020	08/13/2020
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	05/28/2020	05/28/2020	08/13/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	PRP	Potentially Responsible Parties	EPA	04/27/2020	05/06/2020	06/09/2020
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	02/05/2020	04/24/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	SSTS	Section 7 Tracking Systems	EPA	07/20/2020	07/21/2020	10/08/2020
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	PADS	PCB Activity Database System	EPA	10/09/2019	10/11/2019	12/20/2019
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/05/2020	08/10/2020	10/08/2020
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	FINDS	Facility Index System/Facility Registry System	EPA	02/03/2020	03/03/2020	05/28/2020
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RMP	Risk Management Plans	Environmental Protection Agency	07/24/2020	08/03/2020	10/21/2020
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017
US	PWS	Public Water System Data	EPA	12/17/2013	01/09/2014	10/15/2014
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	ABANDONED MINES	Abandoned Mines	Department of Interior	06/22/2020	06/22/2020	09/10/2020
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	06/30/2019	05/28/2020	08/12/2020
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	06/30/2020	07/21/2020	10/07/2020
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	06/22/2020	06/22/2020	09/04/2020
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	06/01/2020	06/02/2020	08/14/2020
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	05/28/2020	05/29/2020	08/12/2020
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	06/04/2020	06/05/2020	08/17/2020
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	08/19/2020	08/21/2020	09/04/2020
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2018	06/16/2020	08/28/2020
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	07/20/2020	07/21/2020	10/07/2020
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	07/13/2020	07/16/2020	09/29/2020
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	08/05/2020	08/05/2020	10/23/2020
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	05/28/2020	05/29/2020	08/12/2020
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2019	04/15/2020	07/02/2020
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	05/18/2020	05/18/2020	07/31/2020
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	07/06/2020	07/07/2020	09/17/2020
CA	ICE	ICE	Department of Toxic Subsances Control	05/18/2020	05/19/2020	07/31/2020
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	06/08/2020	06/09/2020	08/19/2020
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	05/28/2020	05/29/2020	08/12/2020
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	MINES	Mines Site Location Listing	Department of Conservation	06/08/2020	06/09/2020	08/19/2020
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	05/28/2020	06/02/2020	08/14/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	05/12/2020	05/12/2020	07/28/2020
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	06/01/2020	06/02/2020	08/14/2020
CA	PROC	Certified Processors Database	Department of Conservation	06/08/2020	06/09/2020	08/19/2020
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	08/21/2020	08/21/2020	08/27/2020
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	06/06/2020	06/09/2020	08/20/2020
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	11/19/2019	01/07/2020	03/09/2020
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	04/08/2020	04/09/2020	07/01/2020
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	07/20/2020	07/21/2020	10/07/2020
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/17/2020	08/17/2020	10/21/2020
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	06/27/2020	07/02/2020	09/28/2020
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	06/01/2020	06/02/2020	08/14/2020
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	06/08/2020	06/09/2020	08/20/2020
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	07/20/2020	07/21/2020	10/07/2020
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	07/20/2020	07/21/2020	10/07/2020
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	06/08/2020	06/09/2020	08/19/2020
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2018	07/02/2020	09/17/2020
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020

HISTORICAL USE RECORDS

US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
COUNTY RECORDS						
CA	CS ALAMEDA	Contaminated Sites	Alameda County Environmental Health Services	01/09/2019	01/11/2019	03/05/2019
CA	UST ALAMEDA	Underground Tanks	Alameda County Environmental Health Services	06/30/2020	07/01/2020	07/17/2020
CA	CUPA AMADOR	CUPA Facility List	Amador County Environmental Health	05/18/2020	05/19/2020	06/01/2020
CA	CUPA BUTTE	CUPA Facility Listing	Public Health Department	04/21/2017	04/25/2017	08/09/2017
CA	CUPA CALVERAS	CUPA Facility Listing	Calveras County Environmental Health	06/17/2020	06/18/2020	09/02/2020
CA	CUPA COLUSA	CUPA Facility List	Health & Human Services	04/06/2020	04/23/2020	07/10/2020
CA	SL CONTRA COSTA	Site List	Contra Costa Health Services Department	07/16/2020	07/22/2020	10/08/2020
CA	CUPA DEL NORTE	CUPA Facility List	Del Norte County Environmental Health Divisio	06/08/2020	08/13/2020	10/22/2020
CA	CUPA EL DORADO	CUPA Facility List	El Dorado County Environmental Management Dep	08/13/2020	08/13/2020	10/22/2020
CA	CUPA FRESNO	CUPA Resources List	Dept. of Community Health	06/30/2020	07/01/2020	09/17/2020
CA	CUPA GLENN	CUPA Facility List	Glenn County Air Pollution Control District	01/22/2018	01/24/2018	03/14/2018
CA	CUPA HUMBOLDT	CUPA Facility List	Humboldt County Environmental Health	05/19/2020	05/20/2020	06/15/2020
CA	CUPA IMPERIAL	CUPA Facility List	San Diego Border Field Office	07/14/2020	07/16/2020	09/29/2020
CA	CUPA INYO	CUPA Facility List	Inyo County Environmental Health Services	04/02/2018	04/03/2018	06/14/2018
CA	CUPA KERN	CUPA Facility List	Kern County Public Health	07/28/2020	07/30/2020	10/13/2020
CA	UST KERN	Underground Storage Tank Sites & Tank Listing	Kern County Environment Health Services Depar	07/28/2020	07/30/2020	10/14/2020
CA	CUPA KINGS	CUPA Facility List	Kings County Department of Public Health	05/11/2020	05/12/2020	07/27/2020
CA	CUPA LAKE	CUPA Facility List	Lake County Environmental Health	08/13/2020	08/13/2020	10/23/2020
CA	CUPA LASSEN	CUPA Facility List	Lassen County Environmental Health	01/30/2020	01/31/2020	04/09/2020
CA	AOCONCERN	Key Areas of Concerns in Los Angeles County		03/30/2009	03/31/2009	10/23/2009
CA	HMS LOS ANGELES	HMS: Street Number List	Department of Public Works	07/06/2020	07/10/2020	09/28/2020
CA	LF LOS ANGELES	List of Solid Waste Facilities	La County Department of Public Works	07/13/2020	07/13/2020	09/29/2020
CA	LF LOS ANGELES CITY	City of Los Angeles Landfills	Engineering & Construction Division	01/01/2019	01/15/2019	03/07/2019
CA	LOS ANGELES AST	Active & Inactive AST Inventory	Los Angeles Fire Department	06/01/2019	06/25/2019	08/22/2019
CA	LOS ANGELES CO LF METHANE	Methane Producing Landfills	Los Angeles County Department of Public Works	04/30/2012	04/17/2019	05/29/2019
CA	LOS ANGELES HM	Active & Inactive Hazardous Materials Inventory	Los Angeles Fire Department	06/01/2019	06/25/2019	08/22/2019
CA	LOS ANGELES UST	Active & Inactive UST Inventory	Los Angeles Fire Department	06/01/2019	06/25/2019	08/22/2019
CA	SITE MIT LOS ANGELES	Site Mitigation List	Community Health Services	03/25/2020	04/14/2020	07/01/2020
CA	UST EL SEGUNDO	City of El Segundo Underground Storage Tank	City of El Segundo Fire Department	01/21/2017	04/19/2017	05/10/2017
CA	UST LONG BEACH	City of Long Beach Underground Storage Tank	City of Long Beach Fire Department	04/22/2019	04/23/2019	06/27/2019
CA	UST TORRANCE	City of Torrance Underground Storage Tank	City of Torrance Fire Department	06/27/2019	07/30/2019	10/02/2019
CA	CUPA MADERA	CUPA Facility List	Madera County Environmental Health	08/10/2020	08/12/2020	10/23/2020
CA	UST MARIN	Underground Storage Tank Sites	Public Works Department Waste Management	09/26/2018	10/04/2018	11/02/2018
CA	CUPA MERCED	CUPA Facility List	Merced County Environmental Health	07/28/2020	07/30/2020	07/31/2020
CA	CUPA MONO	CUPA Facility List	Mono County Health Department	05/15/2020	06/02/2020	08/14/2020
CA	CUPA MONTEREY	CUPA Facility Listing	Monterey County Health Department	07/13/2020	07/15/2020	07/31/2020
CA	LUST NAPA	Sites With Reported Contamination	Napa County Department of Environmental Manag	01/09/2017	01/11/2017	03/02/2017
CA	UST NAPA	Closed and Operating Underground Storage Tank Sites	Napa County Department of Environmental Manag	09/05/2019	09/09/2019	10/31/2019
CA	CUPA NEVADA	CUPA Facility List	Community Development Agency	07/29/2020	07/30/2020	10/13/2020
CA	IND_SITE ORANGE	List of Industrial Site Cleanups	Health Care Agency	06/10/2020	08/03/2020	10/19/2020
CA	LUST ORANGE	List of Underground Storage Tank Cleanups	Health Care Agency	07/02/2020	08/05/2020	10/23/2020
CA	UST ORANGE	List of Underground Storage Tank Facilities	Health Care Agency	07/01/2020	08/03/2020	10/19/2020
CA	MS PLACER	Master List of Facilities	Placer County Health and Human Services	06/08/2020	06/10/2020	08/24/2020
CA	CUPA PLUMAS	CUPA Facility List	Plumas County Environmental Health	03/31/2019	04/23/2019	06/26/2019
CA	LUST RIVERSIDE	Listing of Underground Tank Cleanup Sites	Department of Environmental Health	03/10/2020	03/11/2020	05/20/2020

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St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	UST RIVERSIDE	Underground Storage Tank Tank List	Department of Environmental Health	03/10/2020	03/11/2020	05/20/2020
CA	CS SACRAMENTO	Toxic Site Clean-Up List	Sacramento County Environmental Management	02/18/2020	03/31/2020	06/15/2020
CA	ML SACRAMENTO	Master Hazardous Materials Facility List	Sacramento County Environmental Management	02/24/2020	03/31/2020	06/17/2020
CA	CUPA SAN BENITO	CUPA Facility List	San Benito County Environmental Health	08/04/2020	08/05/2020	10/22/2020
CA	PERMITS SAN BERNARDINO	Hazardous Material Permits	San Bernardino County Fire Department Hazardo	08/04/2020	08/05/2020	10/26/2020
CA	HMMD SAN DIEGO	Hazardous Materials Management Division Database	Hazardous Materials Management Division	06/01/2020	06/02/2020	08/14/2020
CA	LF SAN DIEGO	Solid Waste Facilities	Department of Health Services	04/18/2018	04/24/2018	06/19/2018
CA	SAN DIEGO CO LOP	Local Oversight Program Listing	Department of Environmental Health	07/14/2020	07/16/2020	09/29/2020
CA	SAN DIEGO CO SAM	Environmental Case Listing	San Diego County Department of Environmental	03/23/2010	06/15/2010	07/09/2010
CA	CUPA SAN FRANCISCO CO	CUPA Facility Listing	San Francisco County Department of Environmen	08/03/2020	08/05/2020	10/22/2020
CA	LUST SAN FRANCISCO	Local Oversite Facilities	Department Of Public Health San Francisco Cou	09/19/2008	09/19/2008	09/29/2008
CA	UST SAN FRANCISCO	Underground Storage Tank Information	Department of Public Health	08/03/2020	08/05/2020	10/26/2020
CA	UST SAN JOAQUIN	San Joaquin Co. UST	Environmental Health Department	06/22/2018	06/26/2018	07/11/2018
CA	CUPA SAN LUIS OBISPO	CUPA Facility List	San Luis Obispo County Public Health Departme	07/27/2020	08/12/2020	10/26/2020
CA	BI SAN MATEO	Business Inventory	San Mateo County Environmental Health Service	02/20/2020	02/20/2020	04/24/2020
CA	LUST SAN MATEO	Fuel Leak List	San Mateo County Environmental Health Service	03/29/2019	03/29/2019	05/29/2019
CA	CUPA SANTA BARBARA	CUPA Facility Listing	Santa Barbara County Public Health Department	09/08/2011	09/09/2011	10/07/2011
CA	CUPA SANTA CLARA	Cupa Facility List	Department of Environmental Health	05/08/2020	05/12/2020	07/27/2020
CA	HIST LUST SANTA CLARA	HIST LUST - Fuel Leak Site Activity Report	Santa Clara Valley Water District	03/29/2005	03/30/2005	04/21/2005
CA	LUST SANTA CLARA	LOP Listing	Department of Environmental Health	03/03/2014	03/05/2014	03/18/2014
CA	SAN JOSE HAZMAT	Hazardous Material Facilities	City of San Jose Fire Department	07/30/2020	07/31/2020	10/16/2020
CA	CUPA SANTA CRUZ	CUPA Facility List	Santa Cruz County Environmental Health	01/21/2017	02/22/2017	05/23/2017
CA	CUPA SHASTA	CUPA Facility List	Shasta County Department of Resource Manageme	06/15/2017	06/19/2017	08/09/2017
CA	LUST SOLANO	Leaking Underground Storage Tanks	Solano County Department of Environmental Man	06/04/2019	06/06/2019	08/13/2019
CA	UST SOLANO	Underground Storage Tanks	Solano County Department of Environmental Man	08/25/2020	08/26/2020	09/16/2020
CA	CUPA SONOMA	Cupa Facility List	County of Sonoma Fire & Emergency Services De	07/07/2020	07/08/2020	09/25/2020
CA	LUST SONOMA	Leaking Underground Storage Tank Sites	Department of Health Services	07/01/2020	07/02/2020	09/17/2020
CA	CUPA STANISLAUS	CUPA Facility List	Stanislaus County Department of Ennvironmenta	02/04/2020	02/05/2020	04/15/2020
CA	UST SUTTER	Underground Storage Tanks	Sutter County Environmental Health Services	05/26/2020	05/28/2020	08/13/2020
CA	CUPA TEHAMA	CUPA Facility List	Tehama County Department of Environmental Hea	08/11/2020	08/12/2020	10/26/2020
CA	CUPA TRINITY	CUPA Facility List	Department of Toxic Substances Control	07/14/2020	07/16/2020	09/29/2020
CA	CUPA TULARE	CUPA Facility List	Tulare County Environmental Health Services D	08/06/2020	08/06/2020	10/26/2020
CA	CUPA TUOLUMNE	CUPA Facility List	Divison of Environmental Health	04/23/2018	04/25/2018	06/25/2018
CA	BWT VENTURA	Business Plan, Hazardous Waste Producers, and Operating Unde	Ventura County Environmental Health Division	07/10/2020	07/22/2020	10/08/2020
CA	LF VENTURA	Inventory of Illegal Abandoned and Inactive Sites	Environmental Health Division	12/01/2011	12/01/2011	01/19/2012
CA	LUST VENTURA	Listing of Underground Tank Cleanup Sites	Environmental Health Division	05/29/2008	06/24/2008	07/31/2008
CA	MED WASTE VENTURA	Medical Waste Program List	Ventura County Resource Management Agency	07/10/2020	07/22/2020	10/07/2020
CA	UST VENTURA	Underground Tank Closed Sites List	Environmental Health Division	05/26/2020	06/09/2020	08/20/2020
CA	UST YOLO	Underground Storage Tank Comprehensive Facility Report	Yolo County Department of Health	06/23/2020	06/29/2020	09/15/2020
CA	CUPA YUBA	CUPA Facility List	Yuba County Environmental Health Department	08/06/2020	08/07/2020	10/26/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date

STREET AND ADDRESS INFORMATION

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APPENDIX E

DRAINAGE STUDY NARRATIVE

Drainage Study Narrative

For

Laguna Main Apartments

City of Elk Grove, California

Prepared for

KF Development

February 9, 2021

Prepared By:

Peabody engineering

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Introduction

This drainage study is focused on providing drainage analysis for the proposed development of Laguna Main Apartments. This study will demonstrate that stormwater quality requirements are met for this proposed development project. This study will also demonstrate that proposed onsite pipe drainage is sized appropriately.

Background

The Laguna Main Apartments project site is currently undeveloped. The project site is sectioned into two equal parcels, divided by Laguna Main Street. The west side of the project site is bound by Vaux Avenue to the north, Laguna Main Street to the east, Renwick Avenue to the south, and Nolan Street to the west. The east side of the project site is bound by Vaux Avenue to the north, Peets Street to the east, Renwick Avenue to the south, and Laguna Main Street to the west. All perimeter streets have been previously constructed per City of Elk Grove standards and have existing drain, sewer, and water mains that will be utilized for the proposed development of Laguna Main Apartments.

Criteria

STORMWATER QUALITY –

The water quality standards for storm runoff in effect for the City are found in the document entitled "Stormwater Quality Design Manual for Sacramento and South Placer Regions" dated May 2007. This project proposes to meet stormwater quality requirements with multiple bioretention ponds and infiltration planters.

Each parcel of the project site (west and east) was analyzed using the Commercial Sites: Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations Worksheet. This worksheet determines if stormwater quality requirements are met through the numeration of LID points. Bioretention ponds and infiltration planters were sized adequately using this LID worksheet.

Both parcels were analyzed to be LID compliant and therefore the entire project site meets stormwater quality requirements. See Appendix A for completed LID worksheets.

ONSITE PIPE DESIGN –

The onsite pipe analysis completed for Laguna Main Apartments was evaluated using the Rational Method for onsite pipe design, consistent with the City's standards. Each parcel of the project site was divided into six (6) drainage management areas (DMAs) to evaluate required pipe sizes throughout the site.

On the west side, DMAs W1, W4, and W5 will be collected and outfall into the 15" drainage main in Vaux Avenue. DMA W2 will outfall into the 15" drainage main in Vaux Avenue at a separate connection. DMA W3 will outfall into the 30" drainage main in Laguna Main Street. DMA W6 will outfall into the 18" drainage main in Renwick Avenue.

On the east side, DMA E1 will outfall into the 21" drainage main in Vaux Avenue. DMA E2 will outfall into the 21" drainage main in Vaux Avenue at a separate connection. DMA E3 will outfall into the 30" drainage main in Laguna Main Street. DMA E4 and E5 will be collected and outfall into the 18" drainage main in Peets Street. DMA E6 will outfall into the 24" drainage main in Renwick Avenue.

See Table 2 for pipe sizing design. See Appendix B for Storm Drain Study Exhibits. HGLs shown on Storm Drain Study Exhibits were calculated based on As-Built drawings for Laguna West Unit No. 1.

DMA	C	i (in/hr)	Area (ac.)	Total Area (ac.)	Flow (cfs)	Pipe Size (in.)	Pipe Slope (ft/ft)
W1	0.95	1.72	0.33	1.86	3.033	12	0.005
W2	0.95	1.72	0.15	0.15	0.245	12	0.003
W3	0.95	1.72	0.26	0.26	0.424	12	0.003
W4	0.95	1.72	0.78	1.53	2.495	12	0.003
W5	0.95	1.72	0.75	0.75	1.223	12	0.003
W6	0.95	1.72	0.29	0.29	0.473	12	0.003
E1	0.95	1.72	0.33	0.33	0.538	12	0.003
E2	0.95	1.72	0.15	0.15	0.245	12	0.003
E3	0.95	1.72	0.26	0.26	0.424	12	0.003
E4	0.95	1.72	0.78	0.78	1.272	12	0.003
E5	0.95	1.72	0.75	1.53	2.495	12	0.005
E6	0.95	1.72	0.29	0.29	0.473	12	0.003

Table 2. Pipe sizing design calculations using the Rational Method.

Rational Method:

$$Q=CiA$$

where Q=Runoff flow (cfs)
C=Runoff coefficient
i=Rainfall intensity (in/hr)
A=Area (acres)

Example: Watershed W1

$$Q=(0.95)(1.72\ in/hr)(1.86\ ac)=3.03\ cfs$$

Conclusions

It is Peabody Engineering's conclusion that all development can be constructed as proposed for Laguna Main Apartments. The proposed construction of bioretention ponds and infiltration planters will satisfy stormwater quality requirements for this development. Additionally, the onsite pipe system has been sized adequately using the Rational Method to meet City standards.

Appendix A: LID Calculations

Appendix D-2: Commercial Sites: Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations

Name of Drainage Shed: Laguna Main Apartments - West Shed
Location of project: Sacramento

Fill in Blue Highlighted boxes

Step 1 - Open Space and Pervious Area Credits

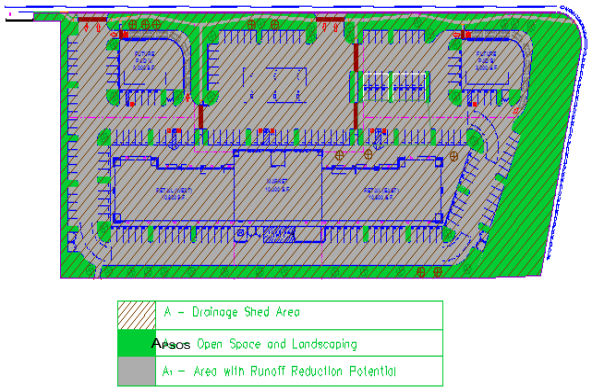
Is your project within the drainage area of a common drainage plan that includes open space? If not, skip to 1 b.

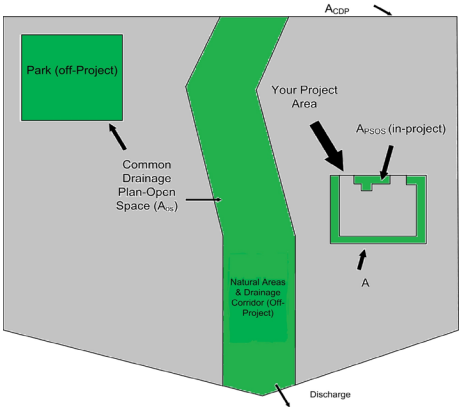
1 a. Common Drainage Plan Area	0	acres		A_{CDP}	
Common Drainage Plan Open Space (Off-project)	0	acres	POI	A_{OS}	see area example below
a. Natural storage reservoirs and drainage corridors	0	acres			
b. Buffer zones for natural water bodies	0	acres			
c. Natural areas including existing trees, other vegetation, and soil	0	acres			
d. Common landscape area/park	0	acres			
e. Regional Flood Control/Drainage basins	0	acres			
1 b. Project Drainage Shed Area (Total)	2.56	acres		A	
Project-Specific Open Space (In-project, communal)**	0.58	acres		A_{PSOS}	
a. Natural storage reservoirs and drainage corridors	0.00	acres			
b. Buffer zones for natural water bodies	0.00	acres			see area example below
c. Natural areas including existing trees, other vegetation, and soil	0.00	acres			
d. Landscape area/park	0.58	acres			
e. Flood Control/Drainage basins		acres			

** Doesn't include impervious areas within individual lots and surrounding individual units. That is accounted for below using Form D-1a in Step 2.

Area with Runoff Reduction Potential	$A - A_{PSOS}$ =	1.98	acres	A_T
Assumed Initial Impervious Fraction	A_T / A =	0.77		I

Open Space & Pervious Area LID Credit (Step 1)
$(A_{OS}/A_{CDP}+A_{PSOS}/A)x100$ = 23 pts





Step 2 - Runoff Reduction Credits

Runoff Reduction Treatments	Impervious Area Managed			Efficiency Factor		Effective Area Managed (A_C)	
Porous Pavement:							
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)	0.186	acres	x	0.75 a	=	0.140	acres
Option 2: Disconnected Pavement (see Fact Sheet, excludes porous pavement used in Option 1)	use Form D-2a for credits →					0.08	acres
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.1210	acres			=	0.12	acres
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.755	acres			=	0.76	acres
Ecoroof (see Fact Sheet)	0	acres			=	0.00	acres
Interceptor Trees (see Fact Sheet)	use Form D-2b for credits →					0.04	acres
Total Effective Area Managed by Runoff Reduction Measures				A_C		1.14	acres

Runoff Reduction Credit (Step 2) $(A_C / A_T)*100$ = 58 pts

Table D-2a

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete/Asphalt	0.60
Modular Block Pavement &	0.75
Reinforced Grass Pavement	1.00

Table D-2b

Maximum roof size	Minimum travel distance
≤ 3,500 sq ft	21 ft
≤ 5,000 sq ft	24 ft
≤ 7,500 sq ft	28 ft
≤ 10,000 sq ft	32 ft

Form D-2a: Disconnected Pavement Worksheet

See Fact Sheet for more information regarding Disconnected Pavement credit guidelines

Effective Area Managed (A_C)

Pavement Draining to Porous Pavement

2. Enter area draining onto Porous Pavement	1.53	acres	Box K1
3. Enter area of Receiving Porous Pavement (excludes area entered in Step 2 under Porous Pavement)	0.19	acres	Box K2
4. Ratio of Areas (Box K1 / Box K2)	8.23		Box K3

1

5. Select multiplier using ratio from Box K3 and enter into Box K4

Ratio (Box D)	Multiplier
Ratio is ≤ 0.5	1.00
Ratio is > 0.5 and < 1.0	0.83
Ratio is > 1.0 and < 1.5	0.71
Ratio is > 1.5 and < 2.0	0.55

	0		Box K4
6. Enter Efficiency of Porous Pavement (see table below)	0.75		Box K5

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete Asphalt Pavement	0.60
Modular Block Pavement Porous Gravel Pavement	0.75
Reinforced Grass Pavement	1.00

7. Multiply Box K2 by Box K5 and enter into Box K6	0.14	acres	Box K6
8. Multiply Boxes K1,K4, and K5 and enter the result in Box K7	0.00	acres	Box K7
9. Add Box K6 to Box K7 and multiply by 60%, and enter the Result in Box K8			0.08 acres

This is the amount of area credit to enter into the "Disconnected Pavement" Box of Form D-2

Form D-2b: Interceptor Tree Worksheet

See Fact Sheet for more information regarding Interceptor Tree credit guidelines

New Evergreen Trees

1. Enter number of new evergreen trees that qualify as Interceptor Trees in Box L1.	44	trees	Box L1
2. Multiply Box L1 by 200 and enter result in Box L2	8800	sq. ft.	Box L2

New Deciduous Trees

3. Enter number of new deciduous trees that qualify as Interceptor Trees in Box L3.		trees	Box L3
4. Multiply Box L3 by 100 and enter result in Box L4	0	sq. ft.	Box L4

Existing Tree Canopy

5. Enter square footage of existing tree canopy that qualifies as Existing Tree canopy in Box L5.	0	sq. ft.	Box L5
6. Multiply Box L5 by 0.5 and enter the result in Box L6	0	sq. ft.	Box L6

Total Interceptor Tree EAM Credits

Add Boxes L2, L4, and L6 and enter it into Box L7	8800	sq. ft.	Box L7
Divide Box L7 by 43,560 and multiply by 20% to get effective area managed and enter result in Box L8	0.04	acres	Box L8

This is the amount of area credit to enter into the "Interceptor Trees" Box of Form D-2

Step 3 - Runoff Management Credits

Capture and Use Credits

Impervious Area Managed by Rain barrels, Cisterns, and automatically-emptied systems

(see Fact Sheet) | - | enter gallons, for simple rain barrels | 0.00 | acres

Automated-Control Capture and Use System

(see Fact Sheet, then enter impervious area managed by the system) | 0.00 | acres

Bioretention/Infiltration Credits

Impervious Area Managed by Bioretention BMPs

(see Fact Sheet)

Bioretention Area	1,195	sq ft	
Subdrain Elevation	6	inches	
Ponding Depth, inches	6	inches	0.20 acres

Impervious Area Managed by Infiltration BMPs

(see Fact Sheet)

	Drawdown Time, hrs		drawdown_hrs_inf	
	Soil Infiltration Rate, in/hr		soil_inf_rate	
Sizing Option 1:	Capture Volume, acre-ft	0.06	capture_vol_inf	0.75 acres
Sizing Option 2:	Infiltration BMP surface area, sq ft	0	soil_surface_area	0.00 acres
	Basin or trench?		approximate BMP depth 0.00 ft	

Impervious Area Managed by Amended Soil or Mulch Beds

(see Fact Sheet) | Mulched Infiltration Area, sq ft | - | mulch_area | 0.00 acres

Total Effective Area Managed by Capture-and-Use/Bioretention/Infiltration BMPs | 0.95 | A_{LIDc}

Runoff Management Credit (Step 3) | A_{LIDC}/A_T*200 = | 96.2 | pts

Total LID Credits (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 176.4

Does project require hydromodification management? If yes, proceed to using SacHM.

Adjusted Area for Flow-Based, Non-LID Treatment	$A_T - A_C - A_{LIDC}$ =	-0.11	A_{AT}
Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment	A_{AT} / A =	-0.04	I_A

STOP: No additional treatment needed

Step 4a Treatment - Flow-Based (Rational Method)

Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area

Look up value for i in Table D-2c (Rainfall Intensity)	0.18	i
Obtain A_{AT} from Step 3	-0.11	A_{AT}
Use C = 0.95	0.95	C
Flow = 0.95 * i * A_{AT}	-0.02	cfs

Table D-2c

Rainfall Intensity			
Roseville	i =	0.20	in/hr
Sacramento	i =	0.18	in/hr
Folsom	i =	0.20	in/hr

Step 4b Treatment - Volume-Based (ASCE-WEF)

Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P_0)

Obtain A from Step 1	2.56	A	12 hrs	Specified Draw Down time
Obtain P_0: Maximized Detention Volume from figures E-1 to E-4 in Appendix E of this manual using I_A from Step 2.	0.00	P_0		
Calculate treatment volume (acre-ft): **Treatment volume = A x (P_0 / 12)**	0.00	Acre-Feet		

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Appendix D-2: Commercial Sites: Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations

Name of Drainage Shed: Laguna Main Apartments - East Shed
Location of project: Sacramento

Fill in Blue Highlighted boxes

Step 1 - Open Space and Pervious Area Credits

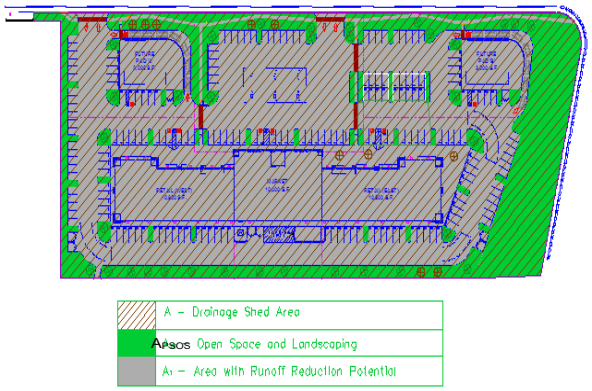
Is your project within the drainage area of a common drainage plan that includes open space? If not, skip to 1 b.

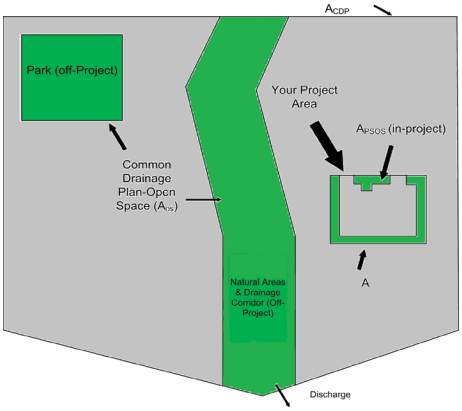
1 a. Common Drainage Plan Area	0	acres		A_{CDP}	
Common Drainage Plan Open Space (Off-project)	0	acres	POI	A_{OS}	**see area example below**
a. Natural storage reservoirs and drainage corridors	0	acres			
b. Buffer zones for natural water bodies	0	acres			
c. Natural areas including existing trees, other vegetation, and soil	0	acres			
d. Common landscape area/park	0	acres			
e. Regional Flood Control/Drainage basins	0	acres			
1 b. Project Drainage Shed Area (Total)	2.56	acres		A	
Project-Specific Open Space (In-project, communal)**	0.57	acres		A_{PSOS}	
a. Natural storage reservoirs and drainage corridors	0.00	acres			
b. Buffer zones for natural water bodies	0.00	acres			**see area example below**
c. Natural areas including existing trees, other vegetation, and soil	0.00	acres			
d. Landscape area/park	0.57	acres			
e. Flood Control/Drainage basins		acres			

** Doesn't include impervious areas within individual lots and surrounding individual units. That is accounted for below using Form D-1a in Step 2.

Area with Runoff Reduction Potential	$A - A_{PSOS}$ =	1.99	acres	A_T
Assumed Initial Impervious Fraction	A_T / A =	0.78		I

Open Space & Pervious Area LID Credit (Step 1)
$(A_{OS}/A_{CDP}+A_{PSOS}/A)x100$ = 22 pts





Step 2 - Runoff Reduction Credits

Runoff Reduction Treatments	Impervious Area Managed			Efficiency Factor		Effective Area Managed (A_C)	
Porous Pavement:							
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)	0.186	acres	x	0.75 a	=	0.140	acres
Option 2: Disconnected Pavement (see Fact Sheet, excludes porous pavement used in Option 1)	use Form D-2a for credits →					0.08	acres
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.1350	acres			=	0.14	acres
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.76	acres			=	0.76	acres
Ecoroof (see Fact Sheet)	0	acres			=	0.00	acres
Interceptor Trees (see Fact Sheet)	use Form D-2b for credits →					0.03	acres
Total Effective Area Managed by Runoff Reduction Measures				A_C		1.15	acres

Runoff Reduction Credit (Step 2) $(A_C / A_T)*100$ = 58 pts

Table D-2a

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete/Asphalt	0.60
Modular Block Pavement &	0.75
Reinforced Grass Pavement	1.00

Table D-2b

Maximum roof size	Minimum travel distance
≤ 3,500 sq ft	21 ft
≤ 5,000 sq ft	24 ft
≤ 7,500 sq ft	28 ft
≤ 10,000 sq ft	32 ft

Form D-2a: Disconnected Pavement Worksheet

See Fact Sheet for more information regarding Disconnected Pavement credit guidelines

Effective Area Managed (A_C)

Pavement Draining to Porous Pavement

2. Enter area draining onto Porous Pavement	1.53	acres	Box K1
3. Enter area of Receiving Porous Pavement (excludes area entered in Step 2 under Porous Pavement)	0.19	acres	Box K2
4. Ratio of Areas (Box K1 / Box K2)	8.23		Box K3

1

5. Select multiplier using ratio from Box K3 and enter into Box K4

Ratio (Box D)	Multiplier
Ratio is ≤ 0.5	1.00
Ratio is > 0.5 and < 1.0	0.83
Ratio is > 1.0 and < 1.5	0.71
Ratio is > 1.5 and < 2.0	0.55

	0		Box K4
6. Enter Efficiency of Porous Pavement (see table below)	0.75		Box K5

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete Asphalt Pavement	0.60
Modular Block Pavement Porous Gravel Pavement	0.75
Reinforced Grass Pavement	1.00

7. Multiply Box K2 by Box K5 and enter into Box K6	0.14	acres	Box K6
8. Multiply Boxes K1,K4, and K5 and enter the result in Box K7	0.00	acres	Box K7
9. Add Box K6 to Box K7 and multiply by 60%, and enter the Result in Box K8			0.08 acres

This is the amount of area credit to enter into the "Disconnected Pavement" Box of Form D-2

Form D-2b: Interceptor Tree Worksheet

See Fact Sheet for more information regarding Interceptor Tree credit guidelines

New Evergreen Trees

1. Enter number of new evergreen trees that qualify as Interceptor Trees in Box L1.	37	trees	Box L1
2. Multiply Box L1 by 200 and enter result in Box L2	7400	sq. ft.	Box L2

New Deciduous Trees

3. Enter number of new deciduous trees that qualify as Interceptor Trees in Box L3.		trees	Box L3
4. Multiply Box L3 by 100 and enter result in Box L4	0	sq. ft.	Box L4

Existing Tree Canopy

5. Enter square footage of existing tree canopy that qualifies as Existing Tree canopy in Box L5.	0	sq. ft.	Box L5
6. Multiply Box L5 by 0.5 and enter the result in Box L6	0	sq. ft.	Box L6

Total Interceptor Tree EAM Credits

Add Boxes L2, L4, and L6 and enter it into Box L7	7400	sq. ft.	Box L7
Divide Box L7 by 43,560 and multiply by 20% to get effective area managed and enter result in Box L8	0.03	acres	Box L8

This is the amount of area credit to enter into the "Interceptor Trees" Box of Form D-2

Step 3 - Runoff Management Credits

Capture and Use Credits

Impervious Area Managed by Rain barrels, Cisterns, and automatically-emptied systems

(see Fact Sheet) | - | enter gallons, for simple rain barrels | 0.00 | acres

Automated-Control Capture and Use System

(see Fact Sheet, then enter impervious area managed by the system) | 0.00 | acres

Bioretention/Infiltration Credits

Impervious Area Managed by Bioretention BMPs

(see Fact Sheet)

Bioretention Area | 1,079 | sq ft
Subdrain Elevation | 6 | inches
Ponding Depth, inches | 6 | inches | 0.18 | acres

Impervious Area Managed by Infiltration BMPs

(see Fact Sheet)

Drawdown Time, hrs | | drawdown_hrs_inf
Soil Infiltration Rate, in/hr | | soil_inf_rate

Sizing Option 1: Capture Volume, acre-ft | 0.06 | capture_vol_inf | 0.75 | acres

Sizing Option 2: Infiltration BMP surface area, sq ft | 0 | soil_surface_area | 0.00 | acres

Basin or trench? | approximate BMP depth | 0.00 | ft

Impervious Area Managed by Amended Soil or Mulch Beds

(see Fact Sheet) Mulched Infiltration Area, sq ft | - | mulch_area | 0.00 | acres

Total Effective Area Managed by Capture-and-Use/Bioretention/Infiltration BMPs | 0.93 | A_{LIDc}

Runoff Management Credit (Step 3) A_{LIDC}/A_T*200 = | 93.7 | pts

Total LID Credits (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 173.9

Does project require hydromodification management? If yes, proceed to using SacHM.

Adjusted Area for Flow-Based, Non-LID Treatment $A_T - A_C - A_{LIDC}$ = -0.09 A_{AT}

Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment A_{AT} / A = -0.04 I_A

STOP: No additional treatment needed

Step 4a Treatment - Flow-Based (Rational Method)

Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area

Look up value for i in Table D-2c (Rainfall Intensity) | 0.18 | i

Obtain A_{AT} from Step 3 | -0.09 | A_{AT}

Use C = 0.95 | 0.95 | C

Flow = 0.95 * i * A_{AT} | -0.02 | cfs

Table D-2c

Rainfall Intensity			
Roseville	i =	0.20	in/hr
Sacramento	i =	0.18	in/hr
Folsom	i =	0.20	in/hr

Step 4b Treatment - Volume-Based (ASCE-WEF)

Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P_0)

Obtain A from Step 1 | 2.56 | A | 12 | hrs | Specified Draw Down time

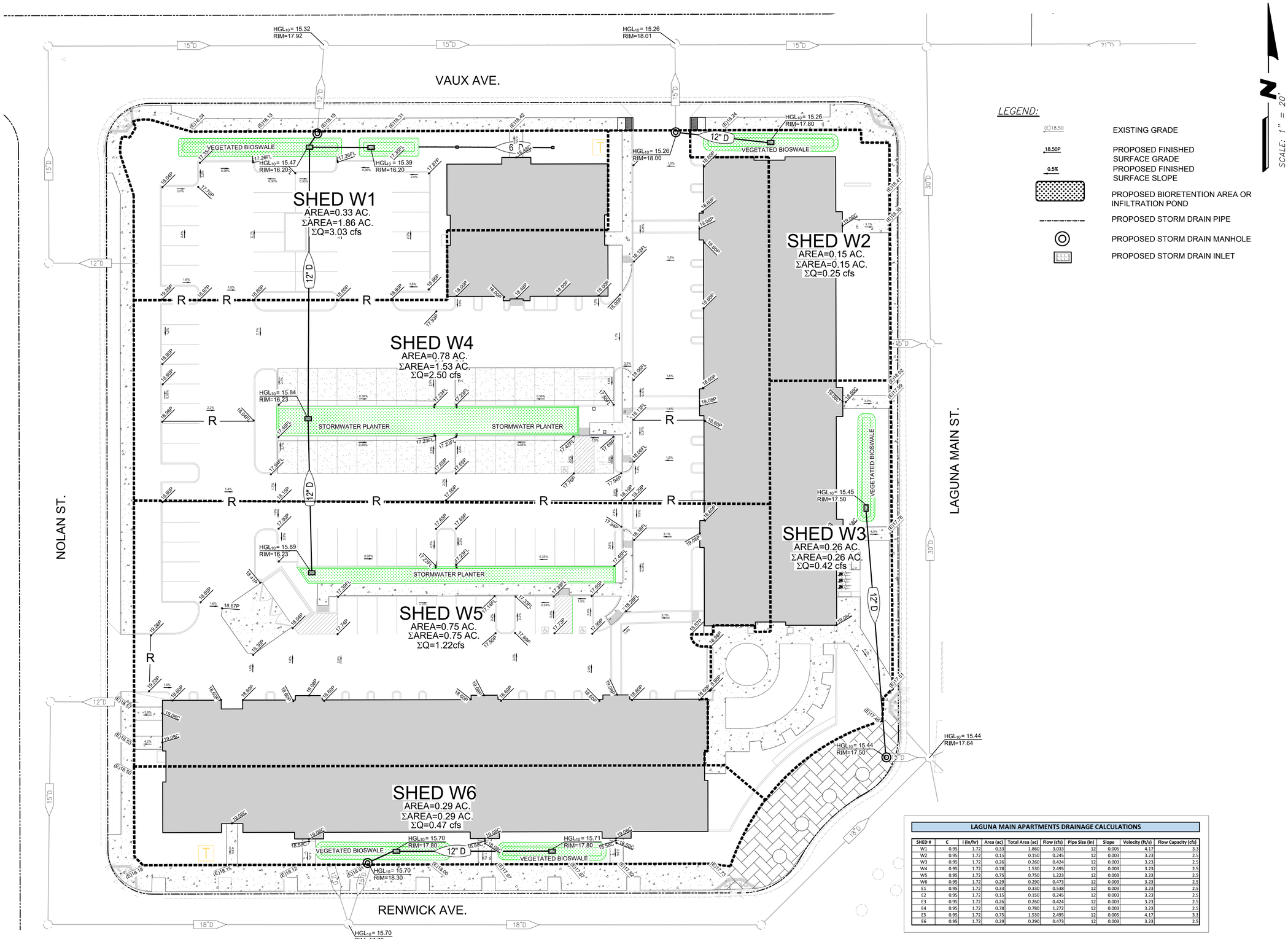
Obtain P_0: Maximized Detention Volume from figures E-1 to E-4 in Appendix E of this manual using I_A from Step 2. | 0.00 | P_0

Calculate treatment volume (acre-ft):

Treatment volume = A x (P_0 / 12) | 0.00 | Acre-Feet

v06232012

Appendix B: Storm Drain Study Exhibits



STORM DRAIN STUDY EXHIBIT – WEST

SCALE:1"=20'

LAGUNA MAIN APARTMENTS DRAINAGE CALCULATIONS

SHED #	C	i (in/hr)	Area (ac)	Total Area (ac)	Flow (cfs)	Pipe Size (in)	Slope	Velocity (ft/s)	Flow Capacity (cfs)
W1	0.95	1.72	0.33	1.860	3.033	12	0.005	4.17	3.3
W2	0.95	1.72	0.15	0.150	0.245	12	0.003	3.23	2.5
W3	0.95	1.72	0.26	0.260	0.424	12	0.003	3.23	2.5
W4	0.95	1.72	0.78	1.530	2.495	12	0.003	3.23	2.5
W5	0.95	1.72	0.75	0.750	1.223	12	0.003	3.23	2.5
W6	0.95	1.72	0.29	0.290	0.473	12	0.003	3.23	2.5
E1	0.95	1.72	0.33	0.330	0.538	12	0.003	3.23	2.5
E2	0.95	1.72	0.15	0.150	0.245	12	0.003	3.23	2.5
E3	0.95	1.72	0.26	0.260	0.424	12	0.003	3.23	2.5
E4	0.95	1.72	0.78	0.780	1.272	12	0.003	3.23	2.5
E5	0.95	1.72	0.75	1.530	2.495	12	0.005	4.17	3.3
E6	0.95	1.72	0.29	0.290	0.473	12	0.003	3.23	2.5

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CLIENT
KF-PROPERTIES
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600-LAGUNA-MAIN-ST.
SUITE-600
ELK-GROVE
**
**

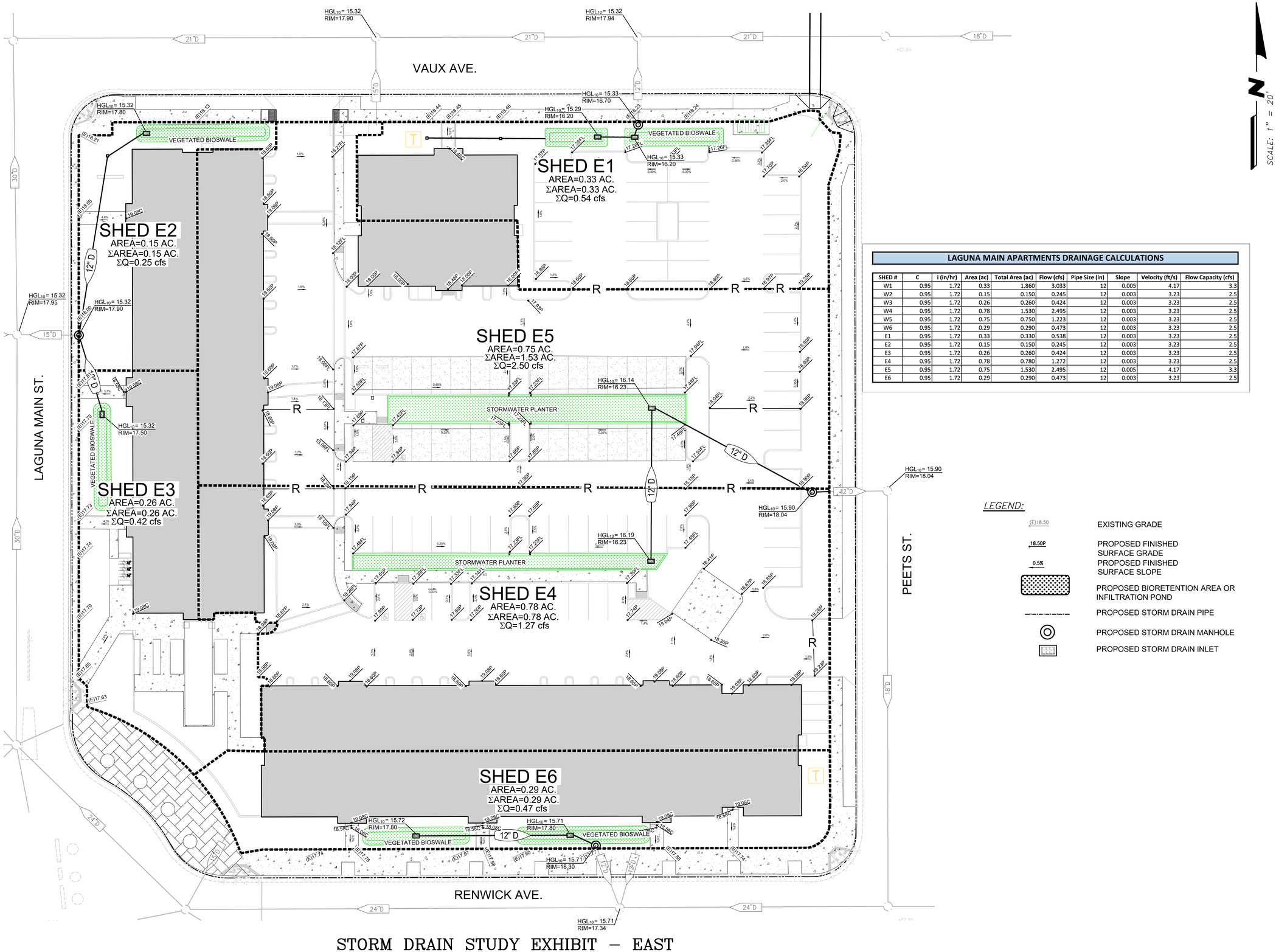
PROJECT TITLE
LAGUNA MAIN APARTMENTS
WEST LAGUNA CT.
ELK GROVE
CALIFORNIA

SHEET TITLE
STORM DRAIN STUDY EXHIBIT – WEST

DELTA	REVISION	DATE:

DRAWN/CHK BY: MT / RP
DATE: 11/16/2020
JOB NO.: 0410.005

SHEET NUMBER
SD.1



STORM DRAIN STUDY EXHIBIT – EAST

SCALE:1"=20'

LAGUNA MAIN APARTMENTS DRAINAGE CALCULATIONS

SHED #	C	i (in/hr)	Area (ac)	Total Area (ac)	Flow (cfs)	Pipe Size (in)	Slope	Velocity (ft/s)	Flow Capacity (cfs)
W1	0.95	1.72	0.33	1.860	3.033	12	0.005	4.17	3.3
W2	0.95	1.72	0.15	0.150	0.245	12	0.003	3.23	2.5
W3	0.95	1.72	0.26	0.260	0.424	12	0.003	3.23	2.5
W4	0.95	1.72	0.78	1.530	2.495	12	0.003	3.23	2.5
W5	0.95	1.72	0.75	0.750	1.223	12	0.003	3.23	2.5
W6	0.95	1.72	0.29	0.290	0.473	12	0.003	3.23	2.5
E1	0.95	1.72	0.33	0.330	0.538	12	0.003	3.23	2.5
E2	0.95	1.72	0.15	0.150	0.245	12	0.003	3.23	2.5
E3	0.95	1.72	0.26	0.260	0.424	12	0.003	3.23	2.5
E4	0.95	1.72	0.78	0.780	1.272	12	0.003	3.23	2.5
E5	0.95	1.72	0.75	1.530	2.495	12	0.005	4.17	3.3
E6	0.95	1.72	0.29	0.290	0.473	12	0.003	3.23	2.5

LEGEND:

- (E)18.50 — EXISTING GRADE
- 18.50P — PROPOSED FINISHED SURFACE GRADE
- 0.5% — PROPOSED FINISHED SURFACE SLOPE
- PROPOSED BIORETENTION AREA OR INFILTRATION POND
- PROPOSED STORM DRAIN PIPE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLET

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REGISTERED PROFESSIONAL ENGINEER No. C51094 Exp. 9-30-21 CIVIL STATE OF CALIFORNIA

CLIENT
KF-PROPERTIES
-
-
600-LAGUNA-MAIN-ST.
SUITE-600
ELK-GROVE
**
**

PROJECT TITLE
LAGUNA MAIN APARTMENTS
WEST LAGUNA CT.
ELK GROVE
CALIFORNIA

SHEET TITLE
STORM DRAIN STUDY EXHIBIT – EAST

DELTA	REVISION	DATE:

DRAWN/CHK BY: MT / RP
DATE: 11/16/2020
JOB NO.: 0410.005

SHEET NUMBER
SD.2

APPENDIX F

ENVIRONMENTAL NOISE ASSESSMENT

Laguna Main Street Apartment
Environmental Noise Assessment

City of Elk Grove, California

December 22, 2020

jcb Project # 2020-130

Prepared for:

RANEY PLANNING & MANAGEMENT, INC.

CITY OF ELK GROVE
PROUD HERITAGE. BRIGHT FUTURE.

Attn:
Rod Stinson
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Sacramento, CA 95834

Prepared by:

j.c. brennan & associates, Inc.

Jim Brennan, INCE
President
Member, Institute of Noise Control Engineering (INCE)

INTRODUCTION

This report describes the existing noise environment in the area of the proposed Laguna Main Street Apartments project in the City of Elk Grove, California and the potential of the proposed project to be exposed to noise levels exceeding the applicable City of Elk Grove exterior and interior noise level standards. In addition, this analysis will evaluate the increase in traffic noise levels along the roadway network and at existing sensitive receptor locations.

The proposed project consists of four parcels that total approximately 5.86 acres, and is located south of Vaux Avenue, between Nolan Street and Peets Street. Surrounding land uses include commercial to the north, Laguna Town Hall and Laguna KinderCare to the south, a church to the southeast, and multi-family residences to the east, west, and the southwest. Figure 1 shows the project site plan.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

Continuous 24-hour Noise Monitoring Site

SCALE: 1" = 40'-0"

Figure 1
Laguna Main Street Apts. Site Plan

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consultants in acoustics

Rev. 1/11/17

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

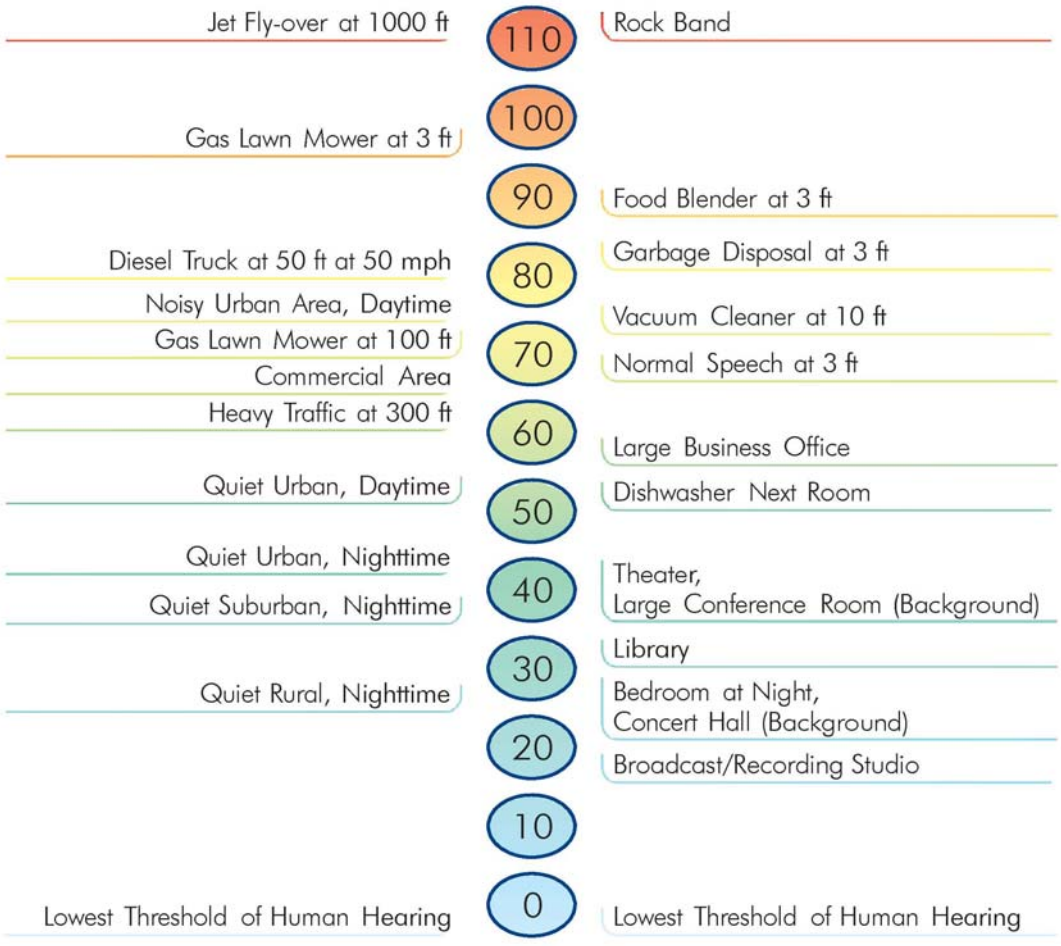
Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. Appendix A provides a summary of acoustical terms used in this report.

Table 1

LOUDNESS COMPARISON CHART (dBA)



An increase of 3 dBA is barely perceptible to the human ear.

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Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

CRITERIA FOR ACCEPTABLE NOISE EXPOSURE

CITY OF ELK GROVE GENERAL PLAN NOISE ELEMENT

The City of Elk Grove General Plan Noise Element establishes noise level criteria for both transportation noise sources, and for non-transportation (stationary) noise sources.

Transportation Noise Source Criteria

For transportation noise sources, the Noise Element establishes an exterior noise level standard of 60 dB L_{dn} and an interior noise level standard of 45 dB L_{dn} at hotels and other transient lodging, as shown in Table 2. The exterior noise level standard is applied at outdoor activity areas to provide an acceptable noise environment for outdoor activities. The interior noise level standard is intended to provide a suitable environment for indoor communication and sleep.

TABLE 2
[TABLE NO-C]
MAXIMUM ALLOWABLE NOISE EXPOSURE
TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Areas [1] L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn}/CNEL, dB	L_{eq}, dB [2]
Residential	60[3]	45	-
Residential subject to noise from railroad tracks, aircraft over-flights	60[3]	40[5]	-
Transient Lodging	60[4]	45	-
Hospitals, Nursing Homes	60[3]	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	60[3]	-	40
Office Buildings	-	-	45
Schools, Libraries, Museums	-	-	45
Playgrounds, Neighborhood Parks	70	-	-

Source: Elk Grove Adopted 11/19/03 | Reflects Amendments through March 2015. General Plan 148

1. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
   Where it is not practical to mitigate exterior noise levels at patios or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
2. As determined for a typical worst-case hour during periods of use.
3. Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best -available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.
4. In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.
5. The intent of this noise standard is to provide increased protection against sleep disturbance for residences located near railroad tracks.

Non-Transportation (Stationary) Noise Source Criteria

For stationary noise sources, the Noise Element establishes noise level performance standards of 55 dB L_{eq} during daytime hours (7 a.m. to 10 p.m.) and 45 dB L_{eq} during nighttime hours (10 p.m. to 7 a.m.) for typical stationary noise sources.

The Noise Element includes trucking operations, shopping centers, car washes, loading docks, and HVAC systems as typical stationary noise sources. The complete noise level performance standards are in Table 3 and Table 4, below.

TABLE 3
[TABLE NO-A, PART 1]
NOISE LEVEL PERFORMANCE STANDARDS FOR TYPICAL STATIONARY NOISE SOURCES

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Leq, dB	55	45

Source: Elk Grove Adopted 11/19/03 | Reflects Amendments through March 2015. General Plan 148

The standards above will apply generally to noise sources that are not tonal, impulsive, or repetitive in nature. Typical noise sources in this category would include HVAC systems, cooling towers, fans, blowers, etc.

TABLE 4 [TABLE NO-A, PART 2] PERFORMANCE STANDARDS FOR STATIONARY NOISE SOURCES WHICH ARE TONAL, IMPULSIVE, REPETITIVE, OR CONSIST PRIMARILY OF SPEECH OR MUSIC		
Noise Level Descriptor	**Daytime (7 a.m. to 10 p.m.)**	**Nighttime (10 p.m. to 7 a.m.)**
Hourly Leq, dB	50	40
Source: Elk Grove Adopted 11/19/03 | Reflects Amendments through March 2015. General Plan 148		
The standards apply to noises which are tonal in nature, impulsive or repetitive, or which consist primarily of speech or music (e.g., humming sounds, outdoor speaker systems, etc.). Typical noise sources in this category include speaker boxes, punch presses, steam valves, and transformer stations.		

The intent of these standards is to provide a suitable noise environment immediately within the property line of lands designated for noise-sensitive uses.

Significance of Changes in Ambient Noise Levels

The significance of project-related noise impacts are also determined by comparison of project-related noise levels to existing no-project noise levels, as required by CEQA. An increase in similar noise levels of less than 3 dB is generally not perceptible. An increase of at least 3 dB in similar noise sources is usually required before most people will perceive a change in noise levels, and an increase of 5 dB is required before the change will be clearly noticeable. For this project, an increase of more than 3 dB due to the project will be considered a significant increase in noise.

EXISTING CONDITIONS

The existing noise environment in the project area is primarily defined by traffic on the local roadway network including Laguna Boulevard, Laguna Main Street and Vaux Avenue. Based upon field observations, the northern portion of the project site is heavily influenced by traffic on Laguna Boulevard.

EXISTING AMBIENT NOISE LEVELS

To quantify the existing ambient noise environment in the project vicinity, a continuous 24-hour noise level measurement was conducted on October 19, 2020. The noise level measurement locations are shown in Figure 1. The noise measurement survey results are provided in Table 5. See Appendix B for the complete 24-hour noise measurement results.

The sound level meter was programmed to record the hourly maximum, median, and average noise levels during the survey. The maximum value, denoted Lmax, represents the highest noise level measured. The average value, denoted Leq, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L50, represents the sound level exceeded 50 percent of the time during the monitoring period.

A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 5 SUMMARY OF MEASURED AMBIENT NOISE LEVELS							
Site	Measured Ldn	Average Hourly Daytime & Evening (7:00am - 10:00pm)			Average Hourly Nighttime (10:00pm – 7:00am)		
		Leq	L50	Lmax	Leq	L50	Lmax
A	63.5 dB	60.6 dB	56.3 dB	73.4 dB	56.1 dB	49.6 dB	73.4 dB
Source: j.c. brennan & associates, Inc. 2020							

The measured noise levels at Site A were less than 65 dB Ldn, but exceeded the 60 dB Ldn exterior noise level standard at the northern portion of the project site. This was due to maximum noise levels associated with Laguna Boulevard.

PROJECT NOISE GENERATION AND POTENTIAL NOISE IMPACTS

TRANSPORTATION NOISE SOURCES

Traffic Noise Levels

Existing and Existing Plus Project Exterior Traffic Noise Levels

j.c. brennan & associates, Inc. employs the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA RD-77-108) for the prediction of traffic noise levels. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA model was used to predict the existing exterior noise levels on the local roadway network. Direct inputs to the traffic noise model included traffic volumes provided by the traffic consultant.

Table 6 shows the predicted existing and existing plus project traffic noise levels on the roadway network and at the project site. Appendix C provides the complete inputs and results of the FHWA traffic noise prediction model.

TABLE 6
EXISTING AND EXISTING PLUS PROJECT TRAFFIC NOISE LEVELS

Roadway	Segment	Traffic Noise Levels (Ldn,)			Distance to Noise Level Contours (feet)					
		Existing	Existing + Project	Δ Change	Existing (Ldn, dB)			Existing + Project (Ldn, dB)		
					70	65	60	70	65	60
Vaux Ave.	West of Nolan St.	55 dB	57 dB	+2 dB	7	16	34	10	22	47
Vaux Ave.	Nolan St. to Laguna Main St.	59 dB	60 dB	+1 dB	15	32	69	16	35	75
Vaux Ave.	Laguna Main St. to Peets St.	57 dB	57 dB	0 dB	10	22	47	11	24	51
Vaux Ave.	East of Peets St.	56 dB	56 dB	0 dB	9	18	40	9	19	40
Peets Street	South of Vaux Ave.	56 dB	56 dB	0 dB	8	18	38	8	18	38
Laguna Main Street	North of Vaux Ave.	60 dB	60 dB	0 dB	17	37	80	19	41	88

[1] Traffic noise levels are modeled at 75-feet from the centerlines of the Roadways
Source: FHWA-RD-77-108 with inputs from Fehr & Peers and j.c. brennan & associates, Inc. - 2020

Based upon Table 6, the project will not result in a significant increase in traffic noise on the local street system. In addition, the project will not result in a exceedance of the City of Elk Grove exterior noise level standards.

Table 7 shows the predicted Existing Plus Project overall noise levels at the project site, based upon the traffic modeling and the measured 24-hour noise levels.

TABLE 7
PREDICTED EXISTING + PROJECT TRAFFIC NOISE LEVELS ON THE PROJECT SITE

Location	Noise Sources	Combined Ldn
Northern Buildings	Laguna Blvdl,, Vaux Ave., Laguna Main St.	65.0 dB
Southern Buildings	Laguna Blvdl,, Vaux Ave., Laguna Main St.	57.0 dB
Clubhouse, Fitness Buildings and Pool	Laguna Blvdl,, Vaux Ave., Laguna Main St.	57.5 dB
Source: j.c. brennan & associates, Inc. 2020		

The data in Table 6 indicate that the common outdoor activity areas for the project comply with the City of Elk Grove 60 dB Ldn exterior noise level standard. Applying the exterior noise level standard at the common outdoor activity areas is consistent with the City of Elk Grove standards as contained in Table NO-C of the General Plan and Table 2 of this report. The buildings along the northern portion of the project could be exposed to traffic noise levels up to 65.0 dB Ldn.

Interior Traffic Noise Levels

Standard construction practices consistent with the uniform building code typically provide an exterior-to-interior noise level reduction of approximately 25 dBA when air conditioning is included for each unit, which allows residents to close windows for the required acoustical isolation.

Since exterior noise levels will not exceed 65 dB Ldn, the interior noise levels are expected to comply with the City of Elk Grove interior noise level standard of 45 dB Ldn.

CONSTRUCTION NOISE LEVELS

The Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) was used to predict noise levels for standard construction equipment used for roadway improvement projects. The assessment of potential significant noise effects due to construction is based on the standards and procedures described in the Federal Transit Authority (FTA) guidance manual and FHWA's RCNM.

The RCNM is a Windows-based noise prediction model that enables the prediction of construction noise levels for a variety of construction equipment based on a compilation of empirical data and the application of acoustical propagation formulas. It enables the calculation of construction noise levels in more detail than the manual methods, which eliminates the need to collect extensive amounts of project-specific input data. RCNM allows for the modeling of multiple pieces of construction equipment working either independently or simultaneously, the character of noise emission, and the usage factors for each piece of equipment.

Construction noise varies depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work.

Noise sources in the RCNM database include actual noise levels and equipment usage percentages. This source data was used in this construction noise analysis. Table 8 shows typical noise levels used in the RCNM data base. Table 9 shows the predicted construction noise levels for each of the project construction phases.

TABLE 8
CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Predicted Noise Levels, Lmax dB				Distances to Noise Contours (feet)	
	Noise Level At 10'	Noise Level At 25'	Noise Level at 50'	Noise Level at 100'	70 dB Lmax contour	65 dB Lmax contour
Backhoe	90	84	78	72	126	223
Compactor	95	89	83	77	223	397
Compressor (air)	90	84	78	72	126	223
Concrete Saw	102	96	90	84	500	889
Dozer	94	88	82	76	199	354
Dump Truck	88	82	76	70	100	177
Excavator	93	87	81	75	177	315
Generator	93	87	81	75	177	315
Jackhammer	100	94	89	83	446	792
Pneumatic Tools	97	91	85	79	281	500

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006. j.c. brennan & associates, Inc. 2020.

TABLE 9
CONSTRUCTION EQUIPMENT NOISE LEVELS FOR CONSTRUCTION PHASES

Equipment	Quantity	Usage (%)	Maximum, L_{max} (dBA at 75 feet)	Hourly Average, L_{eq} (dBA at 75 feet)
Grading of the Site				
Backhoe	1	40	74.0	70.0
Roller	1	20	76.5	69.5
Tractor	1	40	80.5	76.5
			Total:	**78**
Foundation and Concrete Work				
Concrete Pump Truck	1 at a time	20	77.9	70.9
Paver	1	50	73.7	70.7
			Total:	**74**
Rough Framing				
Air Compressors	2	40	74.1	70.2
Generator	1	50	77.1	74.1
Flat Bed Truck	1	40	70.7	66.7
Pneumatic Tools	3	50	81.7	78.6
			Total:	**80.6**

Source: FHWA, Roadway Construction Noise Model (RCNM), January 2006.

The nearest residences are located approximately 75-feet from the edge of the site, and approximately 230-feet from the center of either construction site. Therefore, construction noise levels shown in Table 9 are predicted to occur at the nearest residences.

The City of Elk Grove Noise Ordinance, Chapter 6.32 provides exemptions for construction activities in Section 6.32.100. Item E of the section states the following:

> *E. Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities only occur between the hours of 7:00 a.m. and 7:00 p.m. when located in close proximity to residential uses. Noise associated with these activities not located in close proximity to residential uses may occur between the hours of 6:00 a.m. and 8:00 p.m. However, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in progress be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 7:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner;*

It is recommended that Best Management Practices for controlling noise levels associated with construction are provided. They include the following:

- *Construction should be limited between the hours of 7:00 a.m. to 7:00 p.m when located in close proximity to residential uses. Noise associated with these activities not located in close proximity to residential uses may occur between the hours of 6:00 a.m. and 8:00 p.m.*

- *Construction equipment should be well maintained and used judiciously to be as quiet as practical. Staging areas should be located in areas as far as possible from adjacent uses.*
- *Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.*
- *Utilize "quiet" models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electrical powered equipment and avoid pneumatically powered equipment where feasible.*
- *Locate stationary noise-generating equipment as far as possible from sensitive receptors. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible. Muffle or shield all intake and exhaust ports on power construction equipment.*
- *Where barriers are used to shield equipment, they should block line-of-sight between the equipment and adjacent buildings. Barriers should have a minimum density of 3 pounds per square foot. It may not be possible to construct barriers for large pieces of equipment or mobile equipment.*
- *Prohibit unnecessary idling of internal combustion engines.*
- *Ensure that no pieces of equipment (tractors, trucks, generators, radios, etc.) are started or idled prior to 7 a.m.*
- *Ensure that delivery vehicles arrive to the project site after 7 a.m.*
- *Construction-related deliveries of materials and equipment should avoid residential neighborhoods to the extent possible.*

CONCLUSIONS

The project site will not be exposed to traffic noise levels which exceed the City standards.

The project site will not result in a significant increase in traffic noise levels on the local street system.

The project shall adhere to the hours of operations for construction activities as described in the City of Elk Grove Noise Ordinance, and referenced in this report.

It is recommended that the Best Management Practices for the control of construction noise level are included in the project requirements.

Appendix A
Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50% of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the AMaximum@ level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is s rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

Appendix B
2020-132 Laguna Main Street Apts.
24hr Continuous Noise Monitoring - Site A
Monday, October 19, 2020

Hour	Leq	Lmax	L50	L90
0:00	53	72	45	42
1:00	50	74	43	39
2:00	51	73	43	39
3:00	52	72	45	40
4:00	55	71	50	42
5:00	58	75	56	46
6:00	61	74	58	53
7:00	61	71	58	51
8:00	60	72	57	50
9:00	60	72	56	49
10:00	60	74	57	49
11:00	61	78	56	50
12:00	60	72	56	50
13:00	60	75	56	50
14:00	61	75	56	52
15:00	62	76	57	52
16:00	62	74	57	52
17:00	62	72	58	56
18:00	61	73	56	51
19:00	60	74	56	51
20:00	59	71	55	49
21:00	58	72	54	47
22:00	57	73	54	45
23:00	56	77	52	44

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	62.0	58.0	60.6	61.0	50.0	56.1
Lmax (Maximum)	78.0	71.0	73.4	77.0	71.0	73.4
L50 (Median)	58.0	54.0	56.3	58.0	43.0	49.6
L90 (Background)	56.0	47.0	50.6	53.0	39.0	43.3

Computed Ldn, dB	63.5
% Daytime Energy	82%
% Nighttime Energy	18%

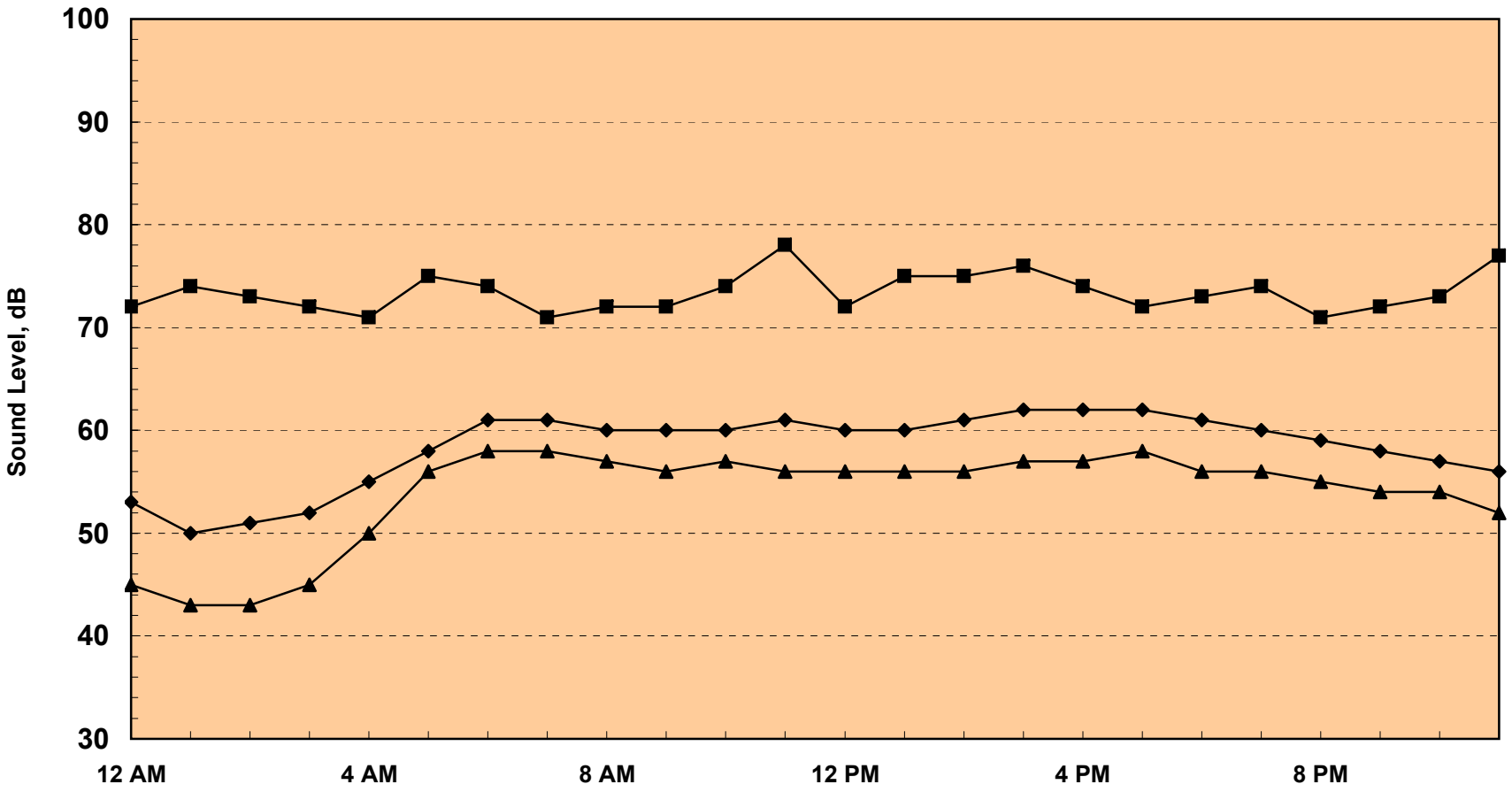
j.c. brennan & associates
consultants in acoustics

Appendix B

2020-132 Laguna Main Street Apts.

24hr Continuous Noise Monitoring - Site A

Monday, October 19, 2020



Ldn = 63.5 dB

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Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2020-130
Description: Existing and Existing + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	**Existing**										
2	Vaux Ave	West of Nolan	960	82		18	2	1	45	75	
3	Vaux Ave	Nolan St. to Laguna Main St.	2,720	82		18	2	1	45	75	
4	Vaux Ave	Laguna Main St. to Peets St.	1,530	82		18	2	1	45	75	
5	Vaux Ave	East of Peets St.	1,190	82		18	2	1	45	75	
6	Peets St	South of Vaux Ave.	2,030	82		18	2	1	35	75	
7	Laguna Main St	North of Vaux Ave.	3,430	82		18	2	1	45	75	
8											
9											
10											
11	**Existing + Project**										
12	Vaux Ave	West of Nolan	1,520	82		18	2	1	45	75	
13	Vaux Ave	Nolan St. to Laguna Main St.	3,110	82		18	2	1	45	75	
14	Vaux Ave	Laguna Main St. to Peets St.	1,730	82		18	2	1	45	75	
15	Vaux Ave	East of Peets St.	1,230	82		18	2	1	45	75	
16	Peets St	South of Vaux Ave.	2,080	82		18	2	1	35	75	
17	Laguna Main St	North of Vaux Ave.	3,950	82		18	2	1	45	75	
18											
19											
20											
21											
22											
23											
24											
25											

Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2020-130
Description: Existing and Existing + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
2	Vaux Ave	West of Nolan	53.6	45.0	46.5	55
3	Vaux Ave	Nolan St. to Laguna Main St.	58.2	49.6	51.1	59
4	Vaux Ave	Laguna Main St. to Peets St.	55.7	47.1	48.6	57
5	Vaux Ave	East of Peets St.	54.6	46.0	47.5	56
6	Peets St	South of Vaux Ave.	53.8	46.6	48.8	56
7	Laguna Main St	North of Vaux Ave.	59.2	50.6	52.1	60
12	Vaux Ave	West of Nolan	55.6	47.0	48.5	57
13	Vaux Ave	Nolan St. to Laguna Main St.	58.8	50.1	51.6	60
14	Vaux Ave	Laguna Main St. to Peets St.	56.2	47.6	49.1	57
15	Vaux Ave	East of Peets St.	54.7	46.1	47.6	56
16	Peets St	South of Vaux Ave.	53.9	46.7	48.9	56
17	Laguna Main St	North of Vaux Ave.	59.8	51.2	52.7	61

Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2020-130
Description: Existing and Existing + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	-------- Distances to Traffic Noise Contours -------- 75	70	65	60	55
2	Vaux Ave	West of Nolan	3	7	16	34	74
3	Vaux Ave	Nolan St. to Laguna Main St.	7	15	32	69	148
4	Vaux Ave	Laguna Main St. to Peets St.	5	10	22	47	101
5	Vaux Ave	East of Peets St.	4	9	18	40	85
6	Peets St	South of Vaux Ave.	4	8	18	38	82
7	Laguna Main St	North of Vaux Ave.	8	17	37	80	172
12	Vaux Ave	West of Nolan	5	10	22	47	100
13	Vaux Ave	Nolan St. to Laguna Main St.	7	16	35	75	162
14	Vaux Ave	Laguna Main St. to Peets St.	5	11	24	51	109
15	Vaux Ave	East of Peets St.	4	9	19	40	87
16	Peets St	South of Vaux Ave.	4	8	18	38	83
17	Laguna Main St	North of Vaux Ave.	9	19	41	88	189

Roadway Construction Noise Model (RCNM),Version 1.0

Report date 12/7/2017
Case Desc Phase 1

		---- Receptor #1 ----		
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R1 west	Commercia	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	75	0
Roller	No	20		80	75	0
Tractor	No	40	84		75	0

	Results						
	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Backhoe	74	70.1	N/A	N/A	N/A	N/A	N/A
Roller	76.5	69.5	N/A	N/A	N/A	N/A	N/A
Tractor	80.5	76.5	N/A	N/A	N/A	N/A	N/A
Total	80.5	78	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.0

Report date 12/7/2017
Case Desc Phase 3

		---- Receptor #1 ----		
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R1 west	Commercia	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Pump Truck	No	20		81.4	75	0
Paver	No	50		77.2	75	0

	Calculated (dBA)		Results	Noise Limits (dBA)			
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Pump Truck	77.9	70.9	N/A	N/A	N/A	N/A	N/A
Paver	73.7	70.7	N/A	N/A	N/A	N/A	N/A
Total	77.9	73.8	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.0

Report date 12/7/2017
Case Desc Phase 4

		---- Receptor #1 ----		
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R1 west	Commercia	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	75	0
Generator	No	50		80.6	75	0
Flat Bed Truck	No	40		74.3	75	0
Pneumatic Tools	No	50		85.2	75	0

	Calculated (dBA)		Results Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compressor (air)	74.1	70.2	N/A	N/A	N/A	N/A	N/A
Generator	77.1	74.1	N/A	N/A	N/A	N/A	N/A
Flat Bed Truck	70.7	66.7	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	81.7	78.6	N/A	N/A	N/A	N/A	N/A
Total	81.7	80.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX G

TRAFFIC ANALYSIS MEMORANDUM

FEHR PEERS

Memorandum

Date: November 18, 2020

To: Rod Stinson, Raney Planning & Management, Inc.

From: Carly Panos and David B. Robinson, PE, Fehr & Peers

Subject: Laguna Main Street Apartments IS/MND – Transportation Analysis

RS20-3964

Fehr & Peers has completed a transportation analysis for the proposed Laguna Main Street Apartment project located in the City of Elk Grove. The proposed project includes a 148-unit multifamily development located on approximately 6-acres of undeveloped land in the Laguna West community. **Figure 1** displays the location of the proposed project. Adjacent land uses include commercial to the north, a government and a day care facility to the south, and residential to the east and west.

The purpose of this study is to analyze traffic impacts of the proposed project including a traffic operations analysis, site access and on-site circulation analysis, and a vehicle miles traveled analysis. This memorandum presents the methodologies, inputs, and results of the analyses.

Data Collection

The following intersections were selected for analysis and consider the proposed use, location of the project within the Laguna West community, and expected generation and distribution of trips.

Intersection turning movement counts were collected during the AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak periods on October 27, 2020 at the following study intersections.

1) Vaux Avenue/Nolan Street
2) Vaux Avenue/Laguna Main Street
3) Vaux Avenue/Peets Street

Based on observed traffic volumes, the AM peak hour at the study intersections is 7:15 AM to 8:15 AM and the PM peak hour is 5:00 PM to 6:00 PM. Due to the COVID-19 pandemic and the resulting changes to travel patterns that have occurred, traffic count data provided by the City of Elk Grove on Laguna Boulevard west of Harbour Point Drive was used to adjust traffic volumes at

the study intersections to more closely reflect pre-pandemic traffic volumes. Mid-week AM and PM peak hour data collected in October 2019 was compared to mid-week AM and PM peak hour data collected in September 2020. Traffic volumes near the study area have decreased by approximately 35 percent during the AM peak hour and 26 percent during the PM peak hour. Therefore, traffic volumes at the study intersections were increased accordingly. **Figure 2** displays the weekday AM and PM peak hour traffic volumes, lane configurations, and traffic controls.

Analysis Methodology and Evaluation Criteria

The study intersections were analyzed using procedures and methodologies contained in the *Highway Capacity Manual 6th Edition* (Transportation Research Board, 2016). These methodologies were applied using Synchro 10 software, which considers traffic volumes, lane configurations, speed, heavy vehicle percentages, and other pertinent parameters of intersection operations.

The City of Elk Grove's General Plan Policy MOB-1-3 includes performance targets for intersections. These targets represent aspirational goals but are not mandated performance standards. The performance target for side-street and all-way stop control intersections is less than 35.1 seconds of delay. Intersection delay at all study intersections was compared to the Intersection Performance Target.

Existing Conditions

Existing Pedestrian Facilities

The Laguna West community has a robust pedestrian network including sidewalks along most internal roadways as well as pedestrian connections to Bartholomew Park, Lawson Park, Velma & Lester King Park, Hawkins Park and more. Sidewalks are present along all frontages of the proposed project site. Primary access from Laguna Boulevard to the proposed project will be along Laguna Main Street, Haussman Street and Gropius Street. Laguna Main Street and Haussman Street have continuous sidewalks along both frontages connecting the proposed project to Laguna Boulevard. Sidewalks are present along the western frontage of Gropius Street; however, the eastern frontage between Laguna Boulevard and Vaux Avenue does not currently have sidewalks. The City of Elk Grove Improvement Standards (amended June 22, 2020) require a minimum five-foot sidewalk with new development along residential and collector streets; therefore, it is anticipated that a sidewalk will be constructed along the eastern frontage when this parcel is developed.

Existing Bicycle Facilities

The City of Elk Grove Bicycle, Pedestrian and Trails Master Plan (City of Elk Grove, 2014) identifies the following bicycle facility types:

- **Class I Bikeways (Bike Path):** A completely separated right-of-way for the exclusive use of bicycles, pedestrians and, in some cases, equestrians and other non-motorized travel such as roller skating, skateboarding, and so forth. These facilities provide an alternative to sidewalks or on-street bicycle lanes. Crossflow by motor vehicle is minimized. Class I Bikeways provide important recreational opportunities, but can also be used to close gaps to bicycle travel caused by construction of freeways or natural barriers (rivers, streams, etc.).

- **Class II Bikeways (Bike Lane):** A striped lane for one-way bike travel directly on the roadway. Vehicle crossflow generally occurs at intersections and driveways. Bike lanes are usually at least four to five feet wide and delineated from the motor vehicle lane by a solid white stripe. They serve to separate motor vehicle and bicycle traffic and provide for more predictable movements by each. Bike lanes are often established along streets in corridors where there is significant bicycle demand.

- **Class III Bikeways (Bike Route):** An on-street route that provides for shared use of the roadway by bicycles and motor vehicles. Class III facilities are usually designated by Bike Route signs and permanent markings, such as "sharrow symbols," that illustrate to drivers that bicyclists are legitimate users of the lane space. Class III routes are often designated on roadways with low levels of motor vehicle traffic or are used as alternative routes through high-demand corridors.

Designated bike lanes near the project site are located on Laguna Boulevard and Harbour Point Drive. Designated bike routes near the project site are located on Babson Drive and Lakepoint Drive.

Existing Transit Facilities

Transit services in the City of Elk Grove are provided by E-Tran, which is operated by Sacramento Regional Transit (SacRT). Multiple bus stops are located near the project site, including a sheltered bus stop along the northern frontage of the project site east of Laguna Main Street and an unsheltered stop on the southern side of the Laguna West Plaza east of Laguna Main Street. Bus routes that serve the area include Commuter Route 14 and Local Routes 111, 112, 113 and 114.

Commuter Route 14 operates Monday through Friday during the AM peak period from approximately 5:45 AM to 8:15 AM and during the PM peak period from approximately 3:45 PM to 6:15 PM with 30-minute headways. Local Routes 111 and 112 operate Monday through Friday between approximately 6:00 AM and 8:30 PM with hourly headways in each direction. Local Routes 113 and 114 operate Monday through Friday between approximately 6:00 AM and 8:15 PM with hourly headways in each direction and between 7:00 AM and 6:15 PM on Saturdays with one and a half hour headways in each direction.

Existing Intersection Operations

Table 1 presents the results of the existing conditions analysis. Technical calculations are provided in **Attachment A**. As displayed, all intersections operate acceptably under existing conditions.

Table 1: Intersection Operations – Existing Conditions

Intersection	Traffic Control[1]	Peak Hour	Delay[2]
1. Vaux Avenue/Nolan Street	SSSC	AM PM	4 (9) 6 (13)
2. Vaux Avenue/Laguna Main Street	AWSC	AM PM	8 8
3. Vaux Avenue/Peets Street	Signal	AM PM	4 (9) 3 (9)

Notes:

[1] AWSC = All-way stop control; SSSC = Side-street stop control

[2] For all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side street stop-controlled intersections, intersection delay is reported in seconds per vehicle for the worst approach. Intersection delay is calculated using Synchro 10 and is based on the procedures and methodology contained in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016).

Source: Fehr & Peers 2020

Existing Plus Project Conditions

Trip Generation

Project trip generation was estimated using trip rates published in the *Trip Generation Manual 10th Edition* (Institute of Transportation Engineers, 2017). external walk, bike, and transit trips were calculated using MXD+. **Table 2** displays the project trip generation.

Table 2: Project Trip Generation

Land Use	ITE Code	Quantity (du)	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Multi-Family Housing (Mid-Rise)	221	148	805	13	37	50	40	25	65
Walk/Bike Trips			**-36**	**-1**	**-1**	**-2**	**-1**	**-1**	**-2**
Transit Trips			**-25**	**-**	**-1**	**-1**	**-1**	**-**	**-1**
Net New Trips			**744**	**12**	**35**	**47**	**38**	**24**	**62**

Notes:
Trip generation was calculated using trip rates published in the *Trip Generation Manual 10th Edition* (Institute of Transportation Engineers, 2017).
Internal trips and walk, bike and transit trips were calculated using MXD+.

Source: Fehr & Peers, 2020

Trip Distribution and Assignment

Project trips were distributed based on existing travel patterns, access to Laguna Boulevard from within the Laguna West community, and driveway locations of the proposed project. **Figure 3** displays the AM and PM peak hour trip distribution.

Existing Plus Project Intersection Operations

Project trips were added to the study intersections based on the trip generation and distribution previously described. **Figure 4** displays the existing plus project AM and PM peak hour turning movement volumes. **Table 3** presents the results of the existing plus project operations analysis. Technical calculations are provided in **Attachment A**. As displayed, all intersections would operate acceptably under existing plus project conditions.

Table 3: Intersection Operations – Existing Plus Project Conditions

Intersection	Traffic Control	Peak Hour	Existing Delay[1]	Existing Plus Project Delay[1]
1. Vaux Avenue/Nolan Street	SSSC	AM PM	4 (9) 6 (13)	5 (9) 6 (13)
2. Vaux Avenue/Laguna Main Street	AWSC	AM PM	8 8	8 9
3. Vaux Avenue/Peets Street	Signal	AM PM	4 (9) 3 (9)	5 (9) 4 (9)

Notes:

[1] For all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side street stop-controlled intersections, intersection delay is reported in seconds per vehicle for the worst approach. Intersection delay is calculated using Synchro 10 and is based on the procedures and methodology contained in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016).

Source: Fehr & Peers 2020

Site Access and Circulation

Project Driveway Design and Parking Relative to City Standards

The following standards contained in the *City of Elk Grove Improvement Standards Manual* (June 22, 2020) are applicable to the proposed project:

- All driveways, except those providing access to single family residential uses, on two lane streets shall have a minimum throat depth of 25 feet.
- Commercial, office, and multi-family driveways on collector streets shall have a minimum opening of 24-feet.
- Residential driveways on minor street or collector streets at their intersection with a 50-foot back of curb to back of curb or narrower street shall be located a minimum of 15 feet clear from the corner return.

A detailed review of the project site plan (LPAS Architecture + Designs, October 29, 2019) revealed the following:

- The driveway throat depth for driveways proposed on Vaux Avenue is approximately 80 feet and the driveway throat depth for driveways proposed on Nolan Street and Peets Street is approximately 30 feet. Therefore, all driveways exceed the minimum 25-foot throat depth requirement.
- Proposed driveways are approximately 26 feet wide and therefore, comply with the 24-foot-wide minimum requirement.

- Proposed driveways are located at least 15 feet from corner returns of adjacent intersections and therefore, comply with the minimum requirement.

Additionally, the following parking standards identified in Section 23.58 of the *City of Elk Grove Zoning Code* are applicable to the proposed project.

- Multi-family developments shall provide the following number of parking stalls:
  - Studio and one-bedroom units – 1.5 spaces/unit, plus 1 guest space/4 units
  - Two- and three-bedroom units – 2 spaces/unit, plus 1 guest space/4 units
  - Four- or more bedroom units – 3 spaces/unit, plus 1 guest space/4 units
- Standard 90-degree parking stalls shall be at least 9 feet wide and 19 feet long; however, vehicles are permitted to overhang into a landscaped area by 2 feet, provided that the landscape area is extended by 2 feet.
- Dead end aisles are required to have 90-degree angle stalls and shall have a minimum 5-foot backing area.
- Multi-family developments shall install a minimum of 1 bicycle parking space for every 3 units.
- New multifamily residential projects are required to provided dedicated electric vehicle parking spaces with electric vehicle supply equipment and designated spaces for future electric vehicle expansion. A minimum of 2.5 percent of total parking spaces required shall include electric vehicle supply equipment and a minimum 2.5 percent of total parking spaces shall be designated for future installation of electric vehicle supply equipment.

On-site Circulation

We completed a swept path analysis using the AutoTURN software to evaluate the adequacy of the proposed driveways and on-site circulation to accommodate delivery vehicles and trash collection vehicles. **Figures 5-10** show the swept paths for the design vehicles entering, exiting and maneuvering throughout the project site. As displayed, the site plan has been designed to accommodate delivery vehicles and refuse vehicles.

VMT

Analysis Methodology

We developed origin-destination/tour-based transportation analysis VMT forecasts, using the modified version of SACOG's SACSIM regional travel demand forecasting model, developed for the City of Elk Grove General Plan Update and subsequently updated for the City's transportation impact fee program. The City uses total daily VMT and VMT per service population as the basis for VMT analysis. The following describes these two VMT metrics and their intended use:

- VMT per Service Population – Includes the sum of all vehicle miles of travel produced by individual land uses in a project, divide by the sum of total residents living in the project. The VMT per service population metric is used to assess a project against specific land use VMT limits. The Project includes multi-family residential land use. Therefore, the Project is compared to the high density residential VMT limit.

- Total Daily VMT – Includes the sum of all daily vehicle miles of travel produced by all uses within the City of applicable Study Area. Since the Project is located in the City limits, the Citywide cumulative VMT limit that is outlined in Policy MOB-1-1(a)(ii) is used to assess the Project.

The VMT estimates include all trips that have one end in a project location and includes the following:

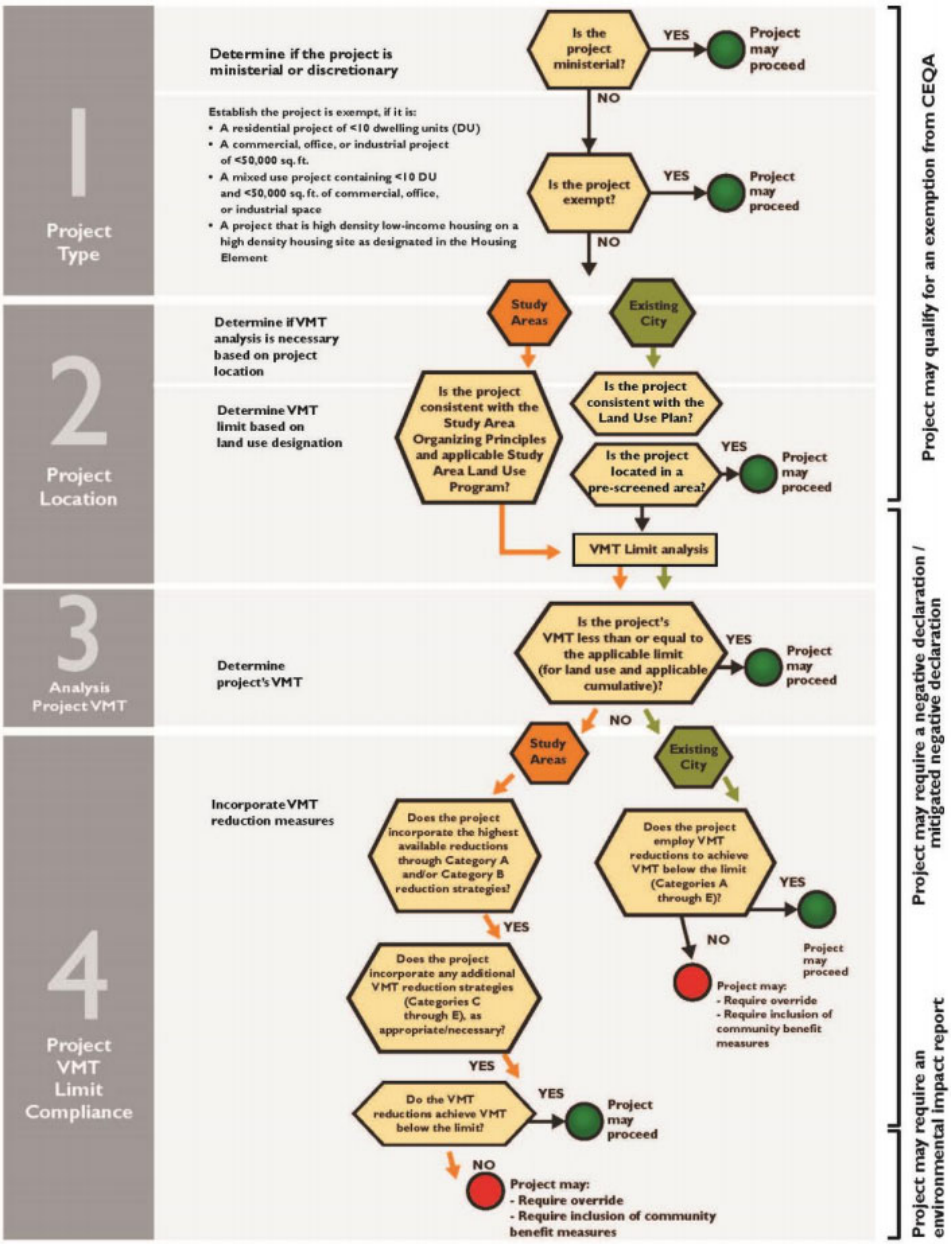
- Trip Types – Includes internal-to-internal (II), internal-to-external (IX), and external-to-internal (XI) trips. External-to-external (XX) trips are excluded.
- Trip Length – Fully accounts for entire length of each trip.
- Trip Tours – Includes trip tours without an origin or destination at the home.

Details of the VMT calculation process are included in Appendix E of the City of Elk Grove Transportation Analysis Guidelines.

Analysis Evaluation Criteria

The following evaluation criteria was used to determine if the addition of the proposed Project would result in an impact in the City of Elk Grove.

The City desires to achieve a reduction in VMT. Reductions in VMT can be accomplished through a combination of land use and mobility actions. To reduce VMT, the City has established the following metrics and limits depicted in the following graphic.

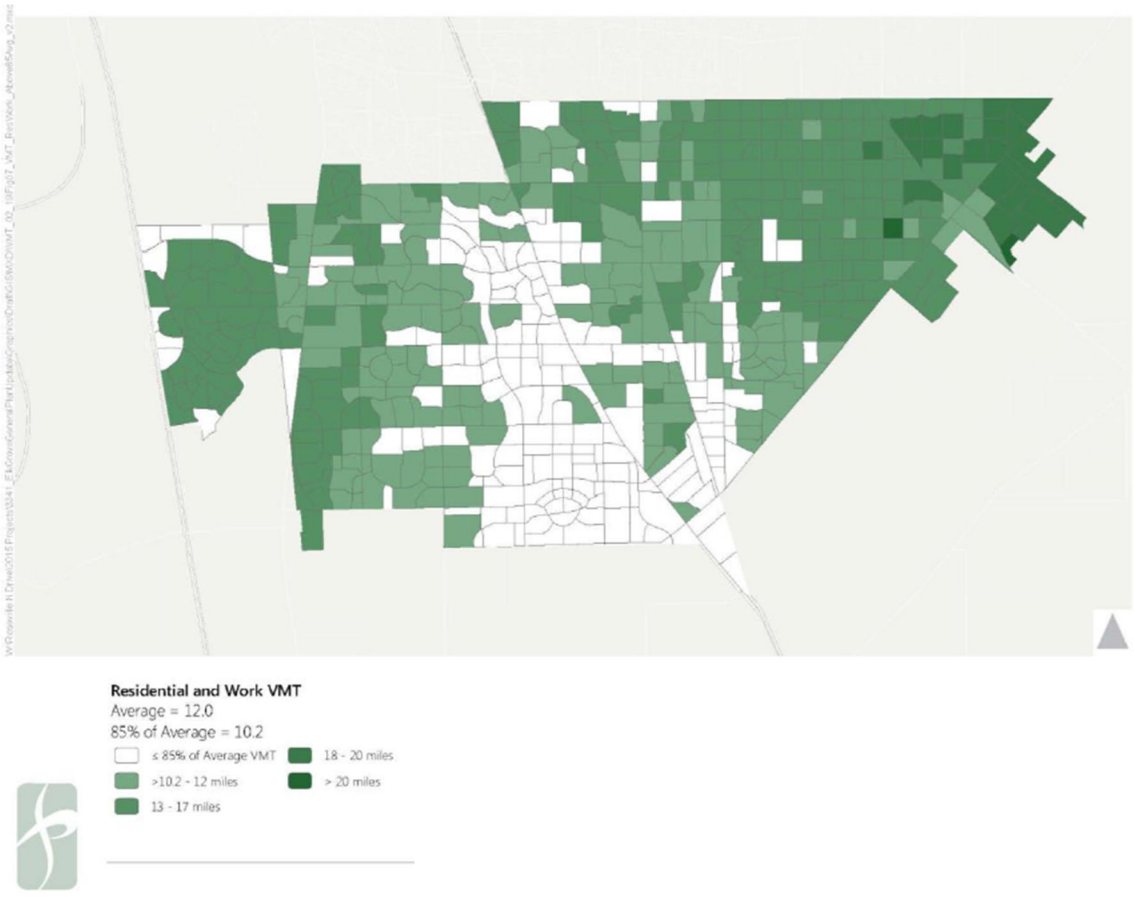


The VMT analysis process for land use projects outlined above includes the following four steps:

- Step 1 (Project Type) – Determine if the project is ministerial or discretionary or if the project is exempt from VMT analysis.
- Step 2 (Project Location) – Determine if VMT analysis is necessary based on project location and determine the Project's VMT limit by land use designation.
- Step 3 (Analyze Project VMT) – Determine the Project's VMT and compare to the VMT limit by land use designation (from Step 2) to determine if VMT mitigation is necessary.

- Step 4 (Project VMT Limit Compliance) – Identify VMT reduction mitigation measures and significance of VMT impacts with mitigation.

The following VMT Screening Map identifies areas in the City that are exempt from VMT analysis. These include sites that have been pre-screened through Citywide VMT analysis. Pre-screened areas are shown in white and have been determined to result in 15 percent or below the average service population VMT established for that land use designation if built to the specifications of the Land Use Plan. With an average VMT per service population of 12.0, the City's target VMT per service population threshold is 10.2.



For projects that have not been pre-screened and that do not achieve the limits outlined below shall be subject to all feasible mitigation measures necessary to reduce the VMT for, or induced by, the Project to the applicable limits. If the VMT for or induced by the Project cannot be reduced consistent with the performance metrics outlined below, the City may consider approval of the Project, subject to a finding of overriding consideration and mitigation of transportation impacts to the extent feasible, provided some other form of community benefit is achieved by the Project.

- New Development – Any new land use plans, amendments to such plans, and other discretionary development proposals (referred to as "development projects") are required to demonstrate a 15 percent reduction in VMT from existing (2015) conditions. To demonstrate this reduction, conformance with following land use and cumulative VMT limits is required:
    1. Land Use – Development projects shall demonstrate that the VMT produced by the project at buildout is equal to or less than the VMT limit of the project's General Plan land use designation, as shown in the following table, which incorporates the 15 percent reduction from 2015 conditions:

Vehicle Miles Traveled Limits by Land Use Designation

Land Use Designation	VMT Limit (daily per service population)
Commercial and Employment Land Use Designations	
Community Commercial	41.6
Regional Commercial	44.3
Employment Center	47.1
Light Industrial/Flex	24.5
Light Industrial	24.5
Heavy Industrial	39.5
Mixed Use Land Use Designations	
Village Center Mixed Use	41.6
Residential Mixed Use	21.2
Public/Quasi Public and Open Space Land Use Designations	
Parks and Open Space[1]	0.0
Resource Management and Conservation[1]	0.0
Public Services	53.1
Residential Land Use Designations	
Rural Residential	34.7
Estate Residential	49.2
Low Density Residential	21.2
Medium Density Residential	20.9
High Density Residential	20.6
Other Land Use Designations	
Agriculture	34.7

Notes:

1. These land use designations are not anticipated to produce substantial VMT, as they have no residents and few to no employees. These land use designations therefore have no limit and are exempt from analysis.

2. Cumulative for Development Projects within the Existing City – Development projects located within the existing (2017) City limits shall demonstrate that cumulative VMT within the City including the project would be equal to or less than the established Citywide limit of 6,367,833 VMT (total daily VMT).
3. Cumulative for Development Projects within Growth Areas – Development projects located in Study Areas shall demonstrate that cumulative VMT within the applicable Study Area would be equal to or less than the established limit shown in the following table.

Study Area Total Vehicle Miles Traveled Limits

Study Area	VMT Limit (total VMT at buildout)
North Study Area	37,622
East Study Area	420,612
South Study Area	1,311,107
West Study Area	705,243

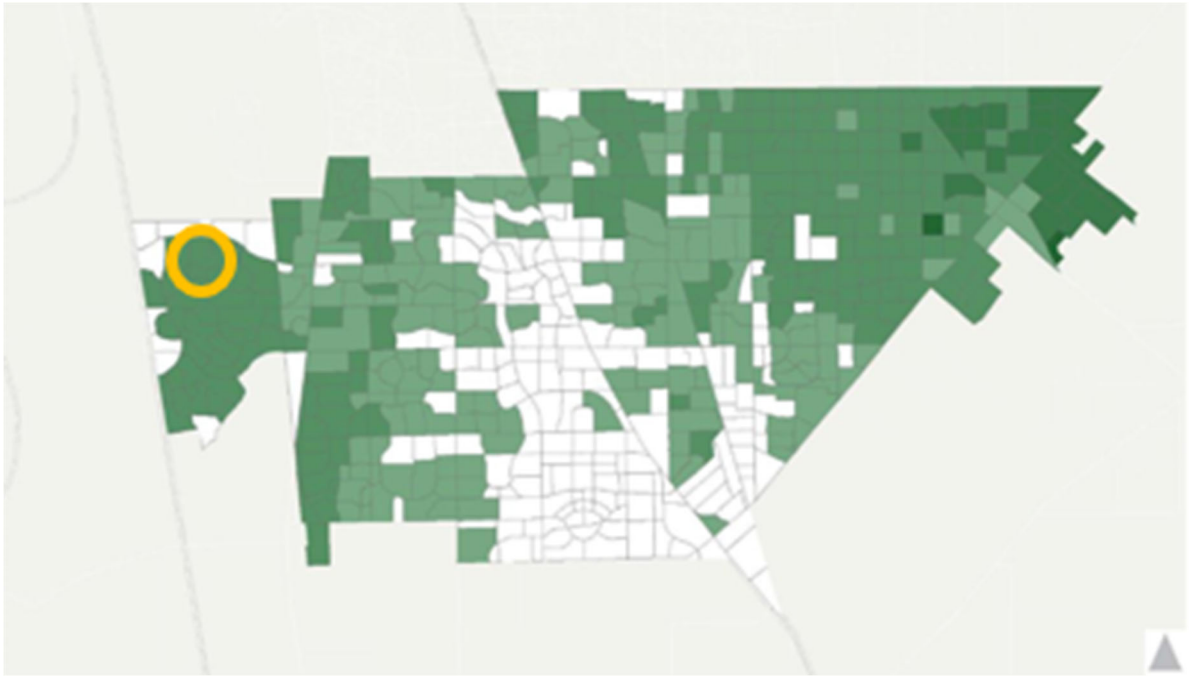
The Project is located within the City limits. The Project and remainder of the City will meet the buildout VMT Limit 6,367,833.

Analysis Results

The Project VMT analysis under cumulative conditions, relative to the threshold of significance presented above, is discussed below. The VMT analysis includes all the roadway improvements included as part of the General Plan VMT analysis.

VMT Screening

The VMT Screening Map identifies areas in the City that are exempt from VMT analysis. These include sites that have been pre-screened through Citywide VMT analysis. Pre-screened areas have been determined to result in 15 percent or below the average service population VMT established for the land use designations for the study area if built to the specifications of the Land Use Plan. As shown, the Project is not located in a pre-screened area.



VMT Limits by Land Use Designation

As outlined above, the Project must demonstrate that the VMT produced by the Project at buildout is equal to or less than the VMT limit of the underlying land use designation. The project site has a General Plan land use designation is Community Commercial. The Project proposes High Density Residential. Therefore, **Table 4** compares the Project's VMT per service population (i.e., residents) to the City's VMT limit for that land use (which incorporates a 15% reduction in total VMT from the 2015 baseline). As shown in **Table 4**, the Project as analyzed will not exceed the City's VMT limit for the High Density Residential land use designation.

Table 4: VMT by Land Use Designation Limits – Project Buildout Conditions

Project	Land Use Designation	VMT Per Service Population		Limit Exceeded?
		Limit	Project	
Buildout	High Density Residential	20.6	20.02	No

Source: Fehr & Peers, 2020.

Citywide VMT Limits

As outlined above, land use development projects located with the existing (2017) City limits shall demonstrate that cumulative VMT within the City, including the Project, would be equal to or less than the City's established total VMT limit. This VMT limit incorporates a 15% reduction in total VMT from the 2015 baseline. **Table 5** compares the citywide total VMT limit to the City's total VMT limit with buildout of the proposed Project. As shown in **Table 5**, the addition of the Project would not exceed the cumulative citywide VMT limit.

Table 5: Citywide VMT Limit – Project Buildout Conditions

Development Projects in Existing City	Total VMT		Limit Exceeded?
	Limit	Project	
Citywide	6,367,833	6,366,759	No

Source: Fehr & Peers, 2020.

1 Study Intersection

Project Site

Figure 1

Study Area

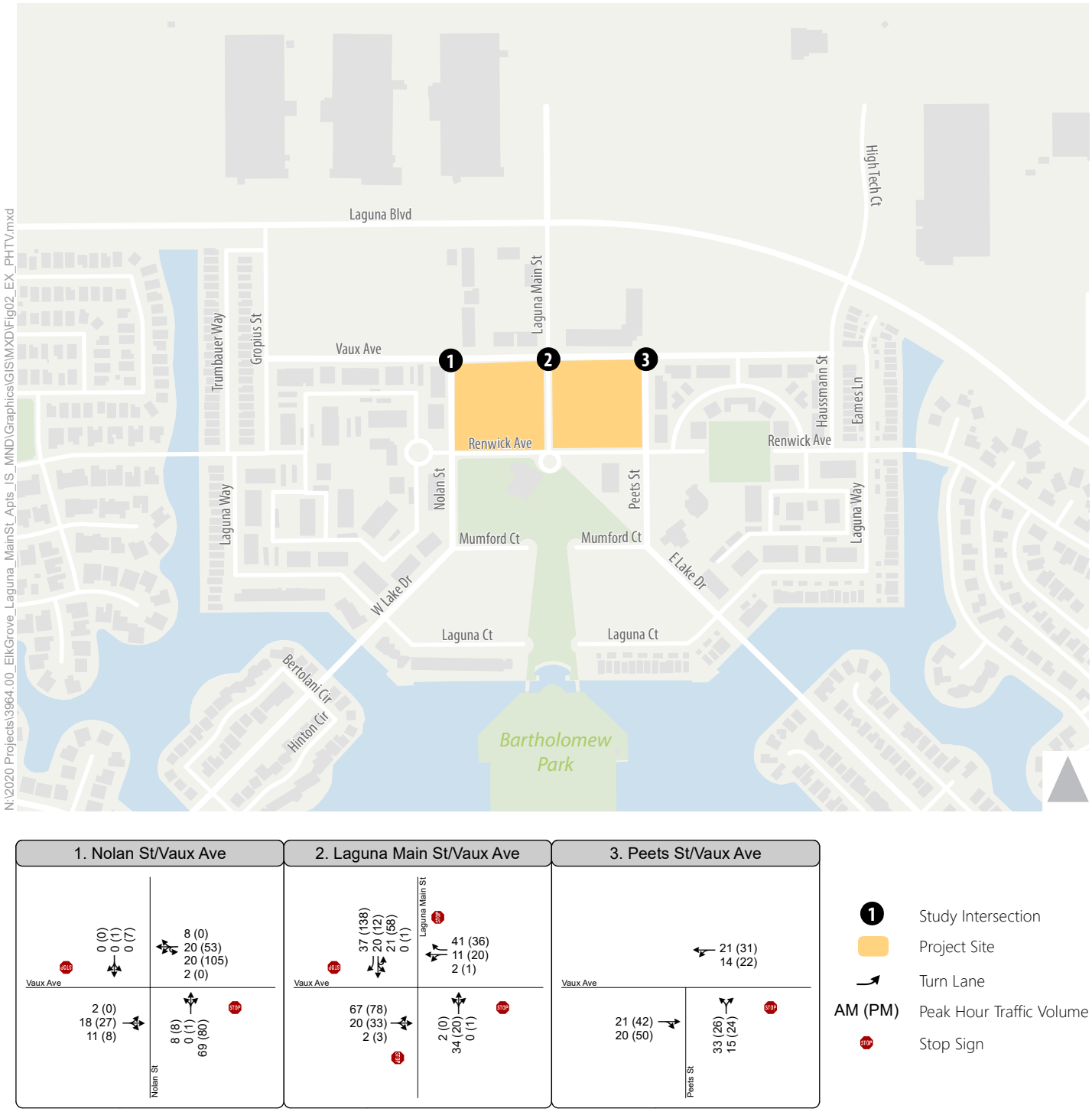


Figure 2

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

xx% Inbound Trip Distribution Percentage

xx% Outbound Trip Distribution Percentage

Project Site

Figure 3A

AM Project Trip Distribution

Figure 3B

PM Project Trip Distribution

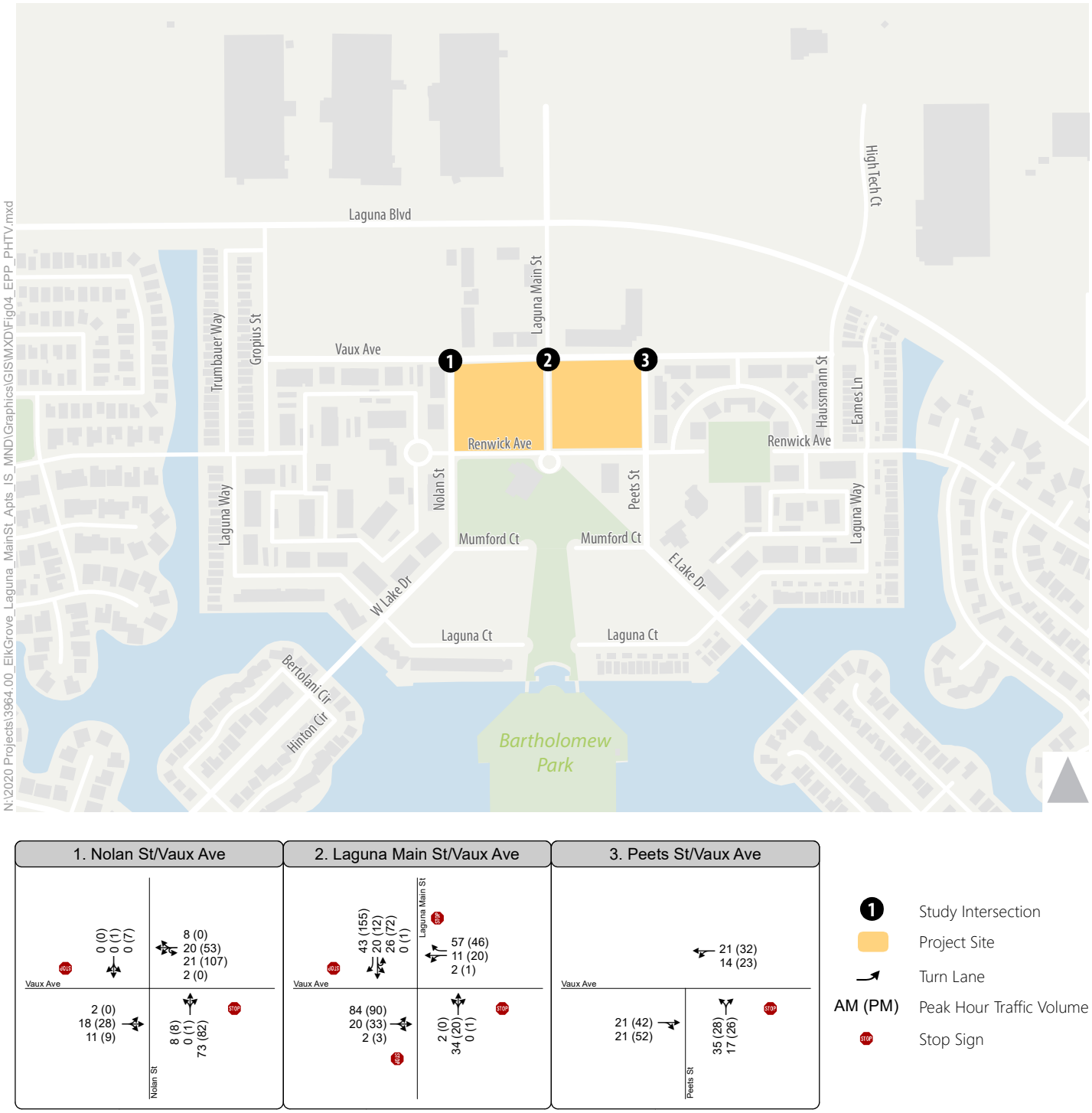


Figure 4

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

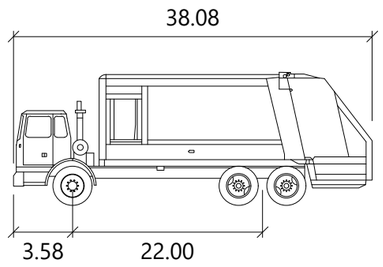
LEGEND

VEHICLE BODY

VEHICLE TIRES

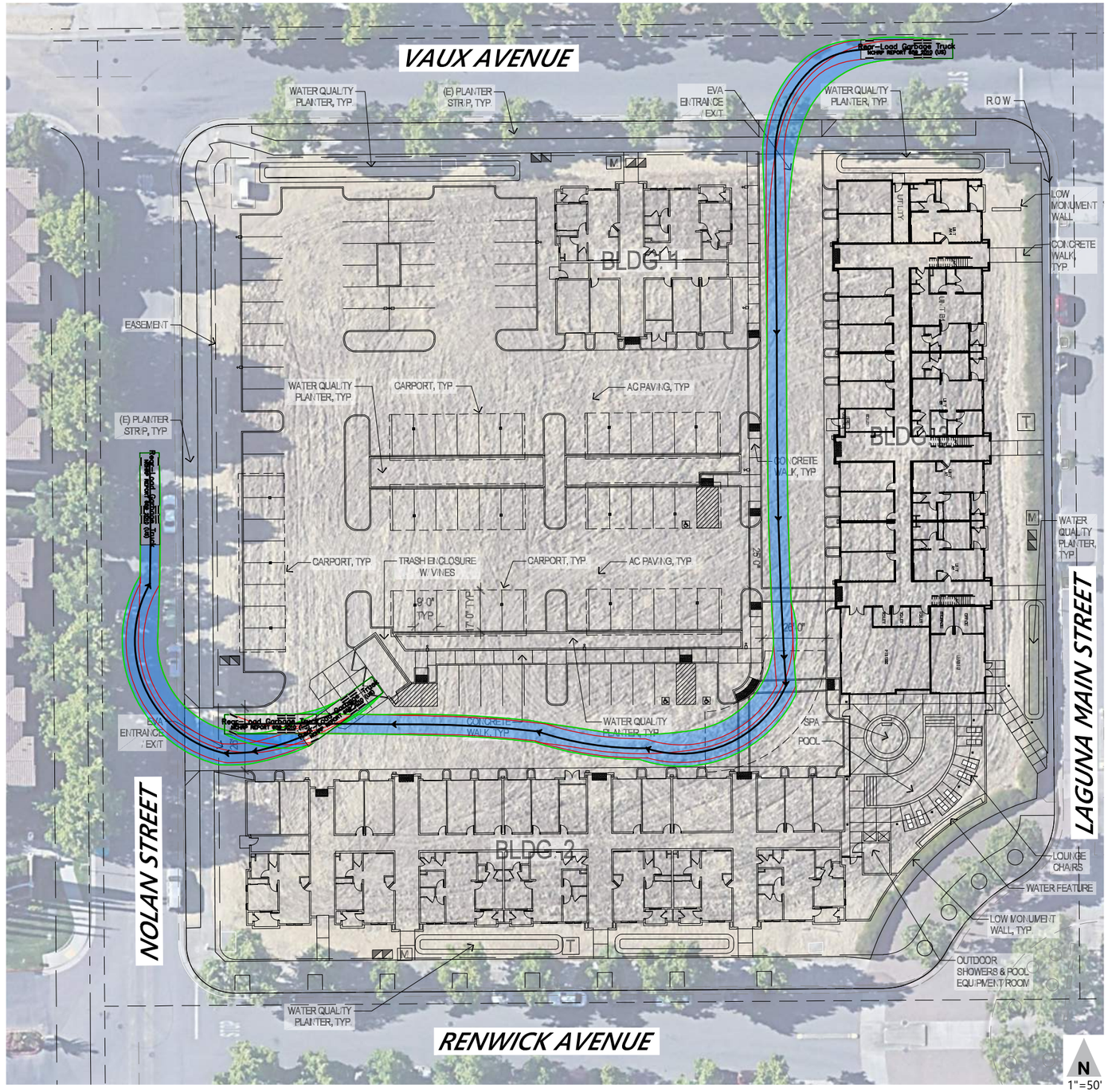
VEHICLE PATH

VEHICLE BODY ENVELOPE



Rear-Load Garbage Truck

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 27.4



50 0 50 100

1" = 50' GRAPHIC SCALE

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 5

Laguna Main Apartments

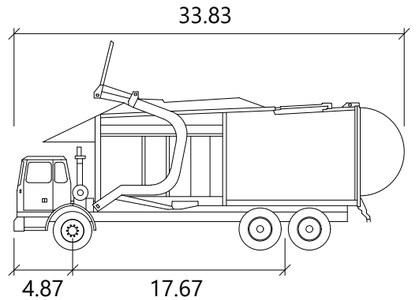
West Site Plan - Truck Turning Exhibit

Rear-Load Garbage Truck

CADD FILE: N:\2020 Projects\3964.00_ElkGrove_Laguna_MainSt_Apts_IS_MND\CAD\3964-Turning-Exhibits.dwg
Nov 17, 2020

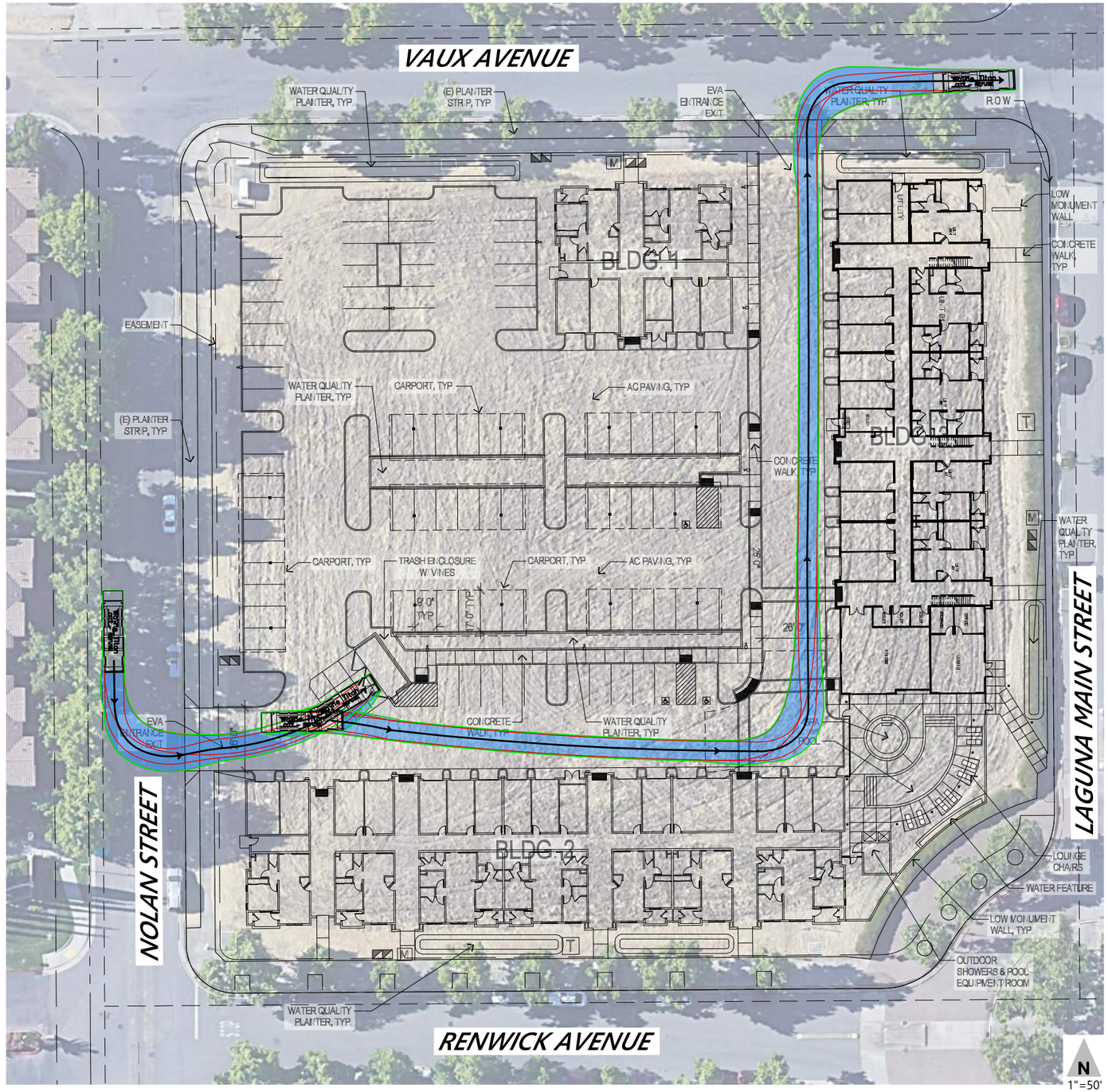
LEGEND

- VEHICLE BODY
- VEHICLE TIRES
- VEHICLE PATH
- VEHICLE BODY ENVELOPE



Front-Load Garbage Truck

	feet
Width	: 8.46
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0



50 0 50 100
1" = 50' GRAPHIC SCALE

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 6
Laguna Main Apartments
West Site Plan - Truck Turning Exhibit
Front-Load Garbage Truck

CADD FILE: N:\2020 Projects\3964.00_ElkGrove_Laguna_MainSt_Apts_IS_MND\CAD\3964-Turning-Exhibits.dwg
Nov 17, 2020

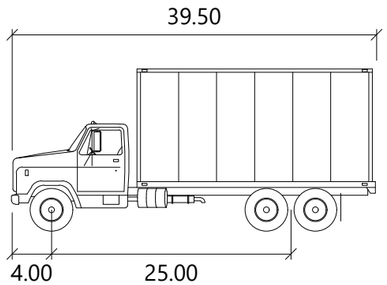
LEGEND

VEHICLE BODY

VEHICLE TIRES

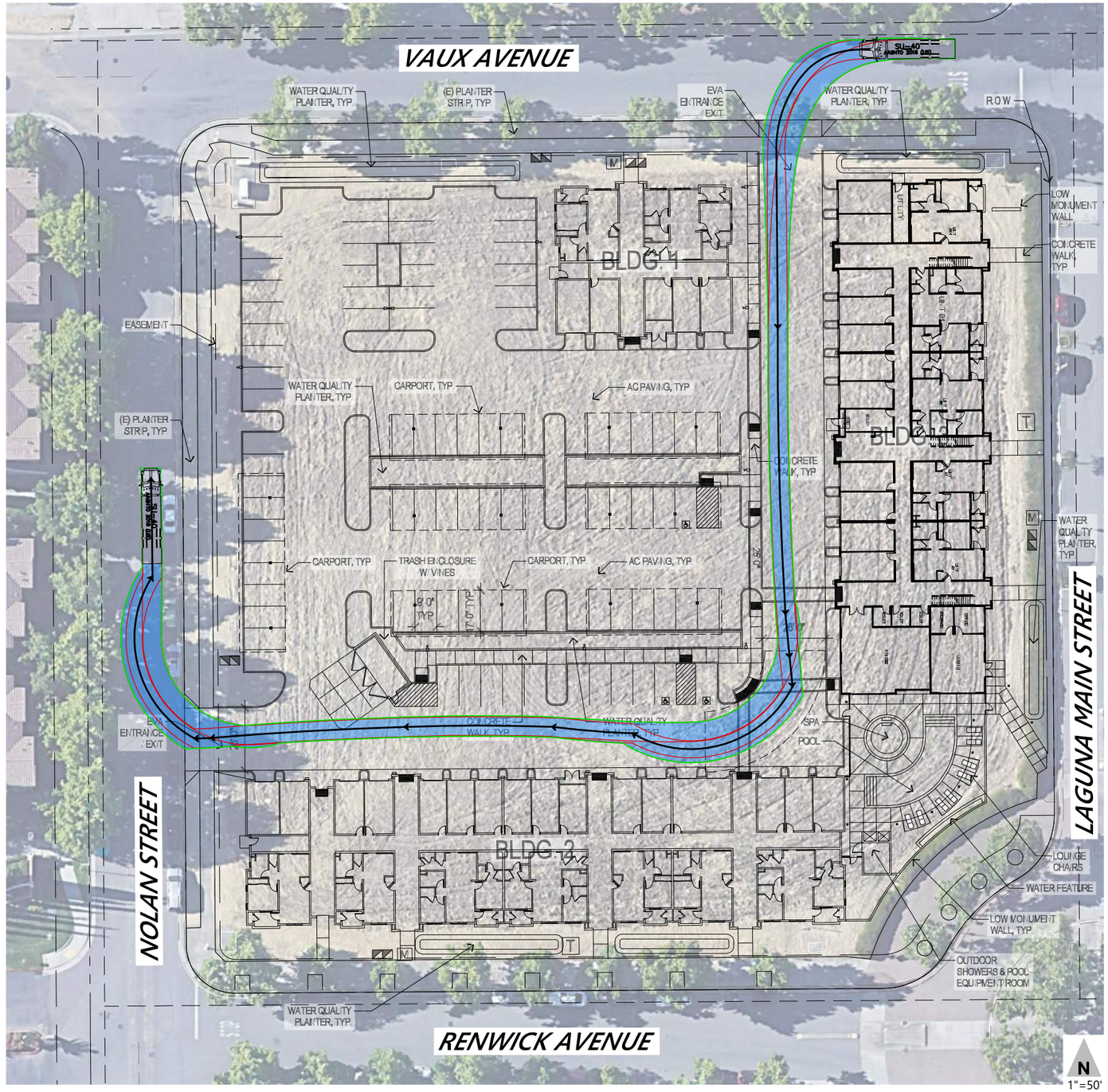
VEHICLE PATH

VEHICLE BODY ENVELOPE



SU-40

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



50 0 50 100

1" = 50' GRAPHIC SCALE

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

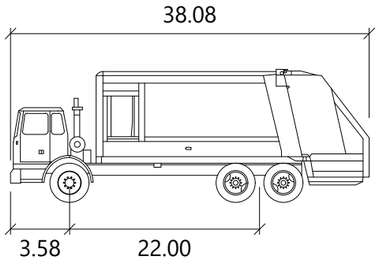
Figure 7

Laguna Main Apartments
West Site Plan - Truck Turning Exhibit
SU-40 Delivery Truck

CADD FILE: N:\2020 Projects\3864.00_ElkGrove_Laguna_MainSt_Apts_IS_MND\CAD\3864-Turning-Exhibits.dwg
Nov 17, 2020

LEGEND

- VEHICLE BODY
- VEHICLE TIRES
- VEHICLE PATH
- VEHICLE BODY ENVELOPE



Rear-Load Garbage Truck

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 27.4

50 0 50 100

1" = 50' GRAPHIC SCALE

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 8

Laguna Main Apartments
East Site Plan - Truck Turning Exhibit
Rear-Load Garbage Truck

CADD FILE: N:\2020 Projects\3864.00_ElkGrove_Laguna_MainSt_Apts_IS_MND\CAD\3864-Turning-Exhibits.dwg
Nov 17, 2020

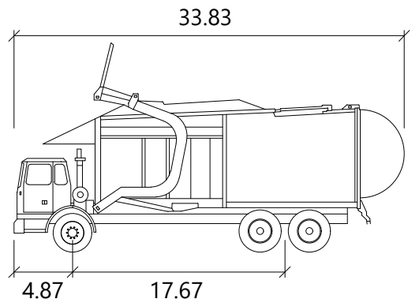
LEGEND

VEHICLE BODY

VEHICLE TIRES

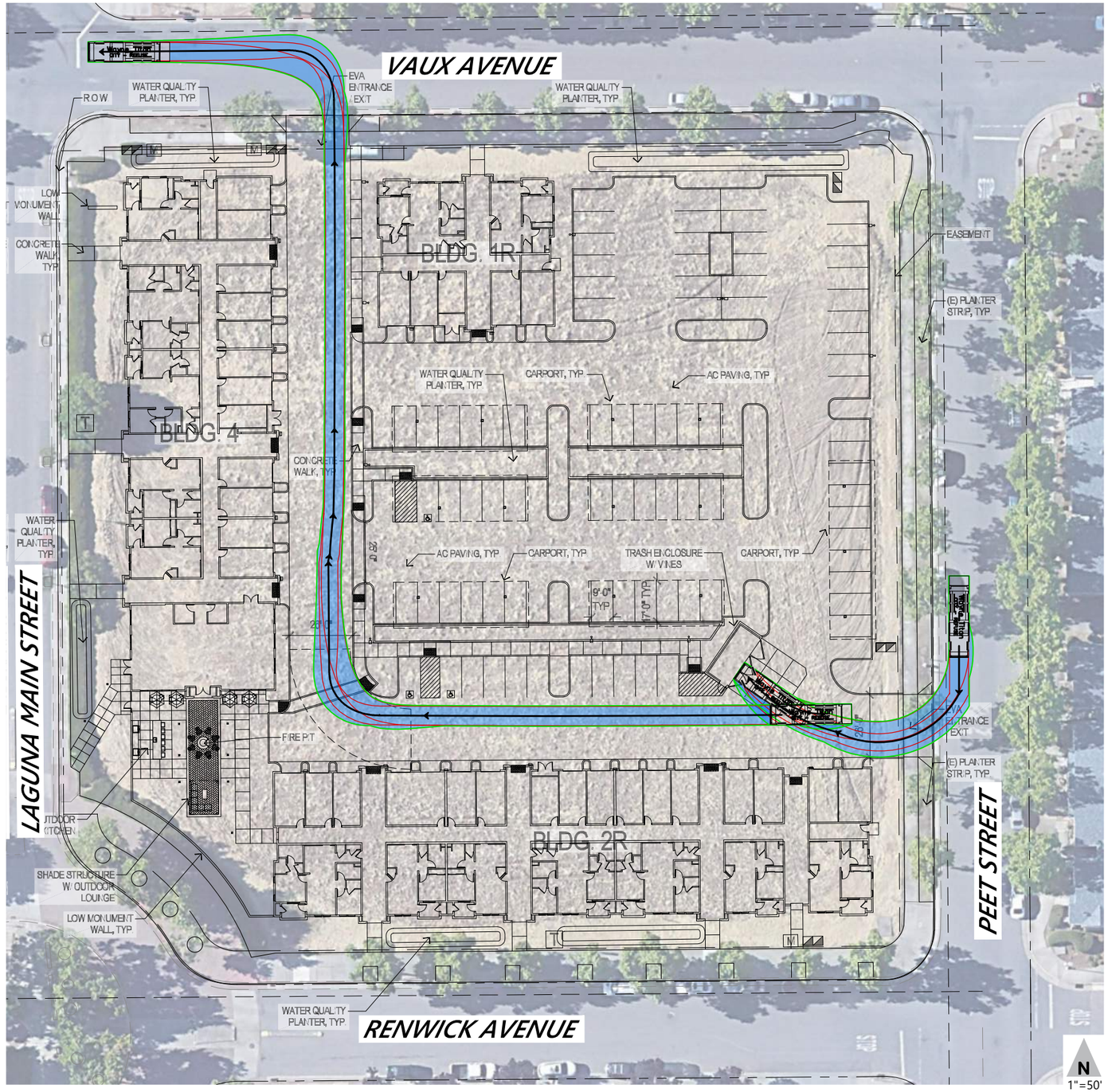
VEHICLE PATH

VEHICLE BODY ENVELOPE



Front-Load Garbage Truck

	feet
Width	: 8.46
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0



50 0 50 100

1" = 50' GRAPHIC SCALE

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 9

Laguna Main Apartments
East Site Plan - Truck Turning Exhibit
Front-Load Garbage Truck

CADD FILE: N:\2020 Projects\3964.00_ElkGrove_Laguna_MainSt_Apts_IS_MND\CAD\3964-Turning-Exhibits.dwg
Nov 17, 2020

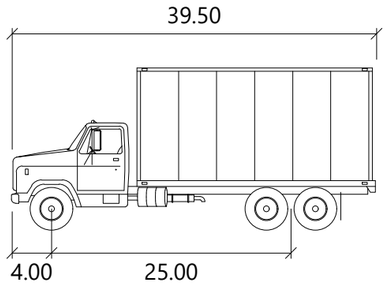
LEGEND

VEHICLE BODY

VEHICLE TIRES

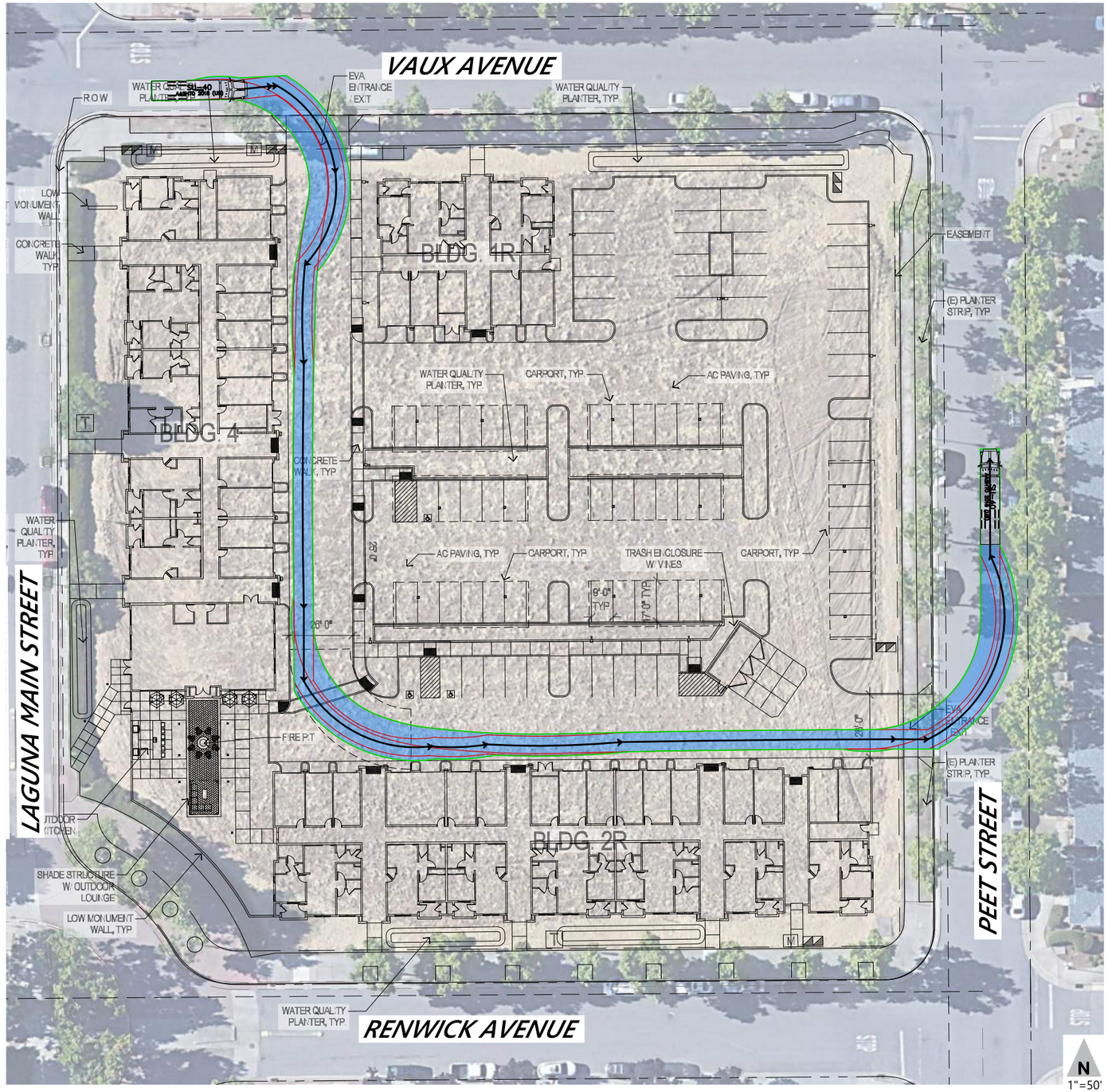
VEHICLE PATH

VEHICLE BODY ENVELOPE



SU-40

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



50 0 50 100

1" = 50' GRAPHIC SCALE

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 10

Laguna Main Apartments
East Site Plan - Truck Turning Exhibit
SU-40 Delivery Truck

CADD FILE: N:\2020 Projects\3864.00_ElkGrove_Laguna_MainSt_Apts_IS_MND\CAD\3864-Turning-Exhibits.dwg
Nov 17, 2020