

# **Initial Study/Mitigated Negative Declaration Orchard View I and II Subdivision Project**

Prepared for  
The City of Live Oak



**August 2020**

**Prepared by**



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## **APPENDIX**

### **Air Quality and Greenhouse Gas Modeling Results**

# INITIAL STUDY

## MARCH 2020

### A. BACKGROUND

Project Title: Orchard View I and II Subdivision Project

Lead Agency Name and Address: City of Live Oak  
9955 Live Oak Boulevard  
Live Oak, CA 95953

Contact Person and Phone Number: Kevin Valente, AICP  
Planning Director  
(530) 695-2112

Project Location: Orchard View I: East of Luther Road extending to Hampton Road  
Assessor's Parcel Numbers (APNs): 06-010-001, 06-600-006, and -007  
Live Oak, California

Orchard View II: South of Pennington Road and east of De Ree Road  
APNs: 06-400-002, -003, and -004  
Live Oak, California

Project Sponsor's Name and Address: Chris Sordi  
401 Watt Avenue #3  
Sacramento, CA 95864  
(916) 384-3130

Existing General Plan Designation: Orchard View I: Low-Density Residential  
Orchard View II: Smaller-Lot Residential

Existing Zoning Designation: Orchard View I: Low Density Residential District (R-1)  
Orchard View II: Small Lot Residential District (R-2)

Required Approvals from Other Public Agencies: None

Surrounding Land Use and Setting:

The Orchard View I and II Subdivision Project (proposed project) consists of two separate sites totaling 38 acres within the City of Live Oak. Currently, both sites are used as orchards. The Orchard View I site is located north of Epperson Way, between Luther Road and the Union Pacific Railroad (UPRR) tracks. Orchard View I is bounded primarily by agricultural land, with a neighborhood of single-family residences to the southeast, and scattered single-family residences located southwest of the site. The Orchard View II site is located at the corner of Pennington Road and De Ree Road, extends along the eastern side of De Ree Road, and is surrounded entirely by single-family residences.

**Project Description Summary:**

The proposed project would include the development of 172 single-family residences split between the two sites, with 129 units proposed for Orchard View I and 43 units proposed for Orchard View II. All lots would be a minimum of 6,000 square feet (sf). The construction of Orchard View I would include the extension of Epperson Way, Tulip Avenue, and Erika Way, as well as several cul-de-sacs and internal circulation roads within the project site. Orchard View II would be built along the east side of De Ree Road, and would involve the extension of Gum Street, Elm Street, and Date Street. The proposed project would require the approval of a Tentative Subdivision Map for each site.

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

The Lone Band of Miwok Indians, the United Auburn Indian Community of the Auburn Rancheria (UAIC), and the Torres Martinez Desert Cahuilla Indians have each previously submitted requests to the City to be consulted during the review process for proposed projects within the City's jurisdiction, pursuant to Public Resources Code Section 21080.3.1. As such, the City provided each of the tribe's notification regarding the proposed project, consistent with Section 21080.3.1 requirements. The City received a request for consultation from the UAIC and in coordination with City staff, mitigation measures were prepared for the proposed project.

## **B. SOURCES**

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

1. Cal Recycle. *SWIS Facility Detail: Recology Ostrom Road LF Inc. (58-AA-0011)*. Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/58-AA-0011>. Accessed February 2020.
2. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.
3. California Department of Conservation. *California Important Farmland Finder*. Available at: [maps.conservation.ca.gov/DLRP/CIFF/](https://maps.conservation.ca.gov/DLRP/CIFF/). Accessed February 2020.
4. California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed February 2020.
5. California Department of Forestry and Fire Protection. *Sutter County, Draft Fire Hazard Severity Zones in LRA*. October 3, 2007.
6. California Department of Transportation (Caltrans). *Transportation Related Earthborne Vibrations*. TAV-02-01-R9601. February 20, 2002.
7. California Geologic Survey. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed February 2020.
8. California School Dashboard. *District Performance Review: Live Oak Unified*. Available at: <https://www.caschooldashboard.org/reports/51713990000000/2019>. Accessed February 2020.
9. City of Live Oak. *Draft 2030 General Plan EIR*. 2008.
10. City of Live Oak. *Storm Drainage System Master Plan*. May 2010.
11. City of Live Oak. *Wastewater Collection System Master Plan*. November 2009.

12. County of Yuba, County of Sutter, City of Yuba, City of Live Oak, City of Wheatland, CDFW, and USFWS. *Planning Agreement regarding the Yuba-Sutter Natural Community Conservation Plan and Habitat Conservation Plan*. November 2011.
13. Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: [https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site\\_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29](https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29). Accessed February 2020.
14. Federal Emergency Management Agency. *Flood Insurance Rate Map 0603950001C*. Effective March 23, 1984.
15. Federal Highway Administration. *Roadway Construction Noise Model User's Guide*. January 2006.
16. Institute of Transportation Engineers. *Trip Generation 9<sup>th</sup> Edition*. November 16, 2012.
17. Native American Heritage Commission. *Orchard View I and II Project, Sutter County*. February 2020.
18. Natural Resource Conservation Service, United States Department of Agriculture. *Web Soil Survey*. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed February 2020.
19. Northwest Information Center. *Records Search Results for the proposed Orchard View I and II project located in Live Oak, Sutter County, California*. February 2020.
20. Sacramento Area Council of Governments. *MTP/SCS 2016 Draft Environmental Impact Report Chapter 13: Noise and Vibration*. September 2019.
21. State Water Resources Control Board. *GeoTracker*. Available at: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=live+oak>. Accessed February 2020.
22. Sutter County Sherriff. *Live Oak Substation*. Available at: <https://www.suttersheriff.org/div/lo/liveoak.aspx>. Accessed February 2020.
23. Sutter County. *Sutter County Groundwater Management Plan*. March 2012.
24. United States Census Bureau. *Quickfacts Live Oak City, California*. Available at: <https://www.census.gov/quickfacts/fact/table/liveoakcitycalifornia/HSD310218#HSD310218>. Accessed February 2020.

### **C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

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The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant" as indicated by the checklist on the following pages.

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

#### **D. DETERMINATION**

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On the basis of this Initial Study:

- ☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
\_\_\_\_\_  
Lead Agency Signature

Kevin Valente, Planning Director  
\_\_\_\_\_  
Printed Name

8/11/2020  
\_\_\_\_\_  
Date

City of Live Oak  
\_\_\_\_\_  
For

## **E. BACKGROUND AND INTRODUCTION**

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This IS/MND identifies and analyzes the potential environmental impacts of the Orchard View I and II Subdivision Project. The information and analysis presented in this document is organized in accordance with 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 project, mitigation measures are prescribed. The mitigation measures prescribed for environmental effects described in this IS/MND will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the project through project conditions of approval. The City will adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with approval of the project.

In 2010, the City of Live Oak completed a comprehensive General Plan Update and an associated Environmental Impact Report (EIR). The General Plan EIR is a program-level 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 Live Oak 2030 General Plan and identified measures to mitigate the significant adverse impacts associated with the Live Oak 2030 General Plan to the maximum extent feasible.

The Live Oak 2030 General Plan designates the Orchard View I site as Low-Density Residential (2 to 6 du/ac). The proposed development on Orchard View I would entail 129 single-family dwelling units on 28.71 acres, for a density of 4.49 dwelling units per acre (du/ac). The Orchard View I site is zoned R-1, which allows detached single-family residences and is consistent with the Low-Density Residential General Plan designation. Thus, the proposed development on Orchard View I would be consistent with the Live Oak 2030 General Plan land use and zoning designations for the site.

The Live Oak 2030 General Plan designates the Orchard View II site as Smaller-Lot Residential (4 to 10 du/ac). The proposed development on Orchard View II would entail 43 single-family dwelling units on 9.68 acres, for a density of 4.44 du/ac. The Orchard View II site is zoned R-2, which allows to single-family residences and duplexes, and is consistent with the Smaller-Lot Residential General Plan designation. Thus, the proposed development on Orchard View II would be consistent with the Live Oak 2030 General Plan land use and zoning designations for the site.

Pursuant to Section 15152 of the CEQA Guidelines, a project which is consistent with the Live Oak 2030 General Plan and zoning of the City may tier from the analysis contained in the General Plan EIR, incorporating by reference the general discussions from the broader General Plan EIR. Given that the proposed project would be consistent with the current Live Oak 2030 General Plan land use designations for each site, the environmental analysis contained in this IS/MND tiers, where applicable, from the General Plan EIR in accordance with CEQA Guidelines Section 15152.

## **F. PROJECT DESCRIPTION**

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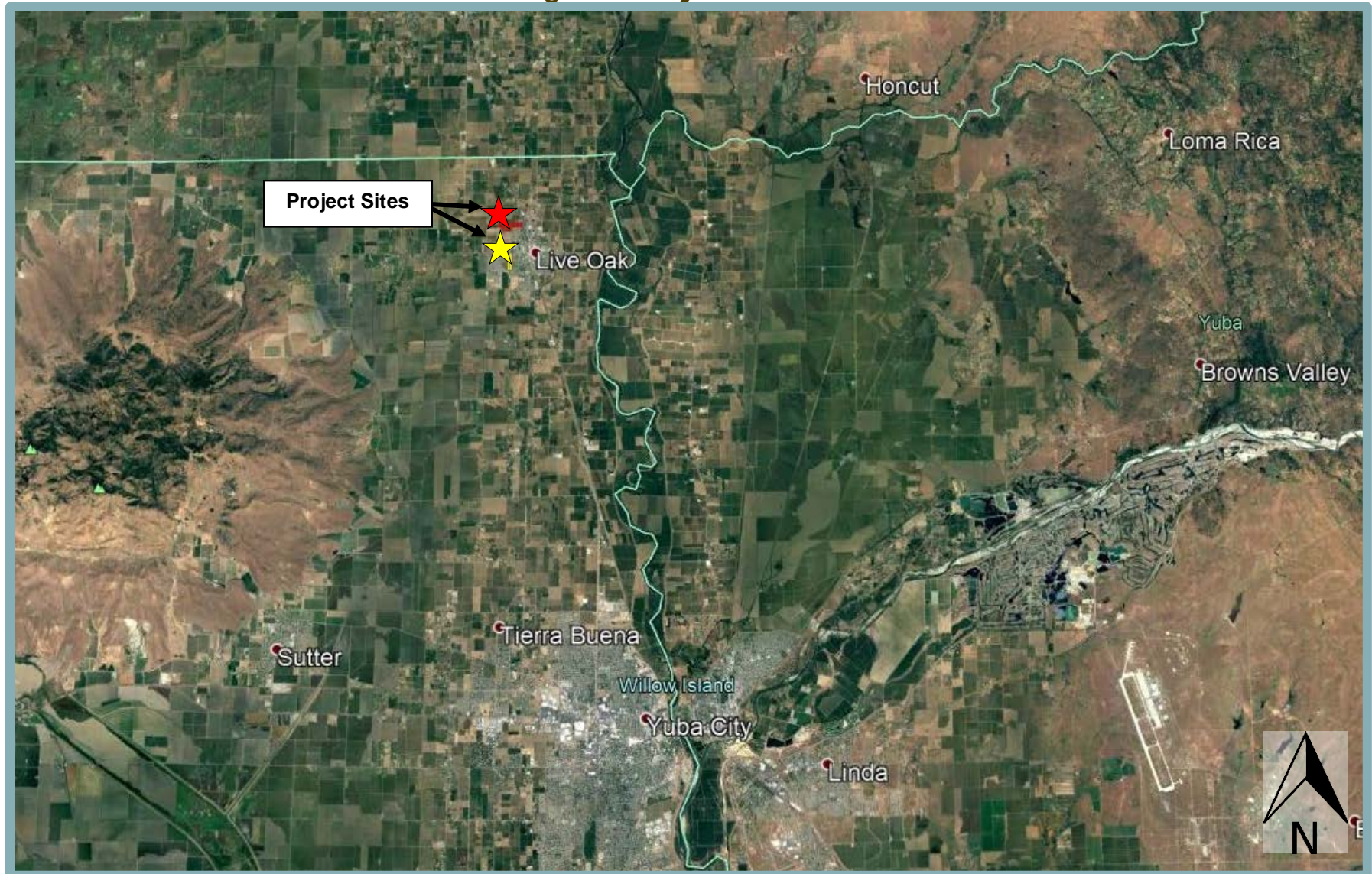
A detailed description of the proposed project, including the project location and setting, surrounding land uses, project components, and required City of Live Oak approvals is provided below.

### **Project Location and Setting**

The project site consists of two separate plots of land, Orchard View I and Orchard View II, in the City of Live Oak. Live Oak is located within Sutter County and is approximately seven miles south of the City of Gridley and 10 miles north of Yuba City (see Figure 1).



**Figure 1**  
**Regional Project Location**



Orchard View I is a 28.7-acre site identified by APNs 06-010-001, 06-600-006, and 06-600-007. The site is located north of Epperson Way, between the UPRR and Luther Road (see Figure 2). The site is currently used as an orchard. Surrounding land uses include single-family residences to the southeast, agricultural land/orchards to the north and west, and scattered single-family residences southwest of the project site. The site is currently designated Low-Density Residential and zoned R-1.

Orchard View II is a 9.8-acre site, and is identified by APNs 06-400-002, -003, and -004. The site is located along the east side of De Ree Road, just south of Pennington Road (See Figure 3). The site is currently used as an orchard, but is surrounded by single-family residential uses on all sides. The site is designated Smaller-Lot Residential under the Live Oak 2030 General Plan and is zoned R-2.

### **Project Components**

The proposed project would include development of two single-family residential subdivisions, consisting of a total of 172 lots, internal circulation systems, and associated improvements. The following sections describe the details of the proposed subdivisions, access and circulation, utilities, and required approvals.

### **Tentative Subdivision Map**

Two Tentative Subdivision Maps (Figure 4 and Figure 5) have been proposed to subdivide the project sites into the individual lots for sale and home construction. Orchard View I would be split into 129 lots with a minimum lot size of 6,000 sf, and Orchard View II would be split into 43 lots with a minimum lot size of 6,000 sf.

### **Access and Circulation**

Access to Orchard View I would be provided from a new egress point along Luther Road, as well as through the proposed extensions of Epperson Way, Erika Way, and Tulip Avenue. The proposed project would include the construction of a new main roadway, Michayla Avenue, and six short cul-de-sacs. To accommodate future connections to the site, Marissa Way and Erika Way extend towards the north.

Orchard View II would be accessible from De Ree Road via new connections to the existing terminus of Gum Street, Elm Street, and Date Street. One cul-de-sac, Chiyoko Court, is proposed within the center of the neighborhood, between Fir Street and Elm Street.

Consistent with the Live Oak 2030 General Plan, four- to six-foot-wide sidewalks would be constructed along all internal roadways. The proposed project would also include frontage improvements along the main roads, including Luther Road, De Ree Road, and Pennington Way.

### **Utilities**

The proposed project would include connections to the existing City utilities located in the vicinity of each project site. Sewer service, water supply, and stormwater drainage would all be provided by the City of Live Oak.



**Figure 2  
Orchard View I Project Vicinity Map**





**Figure 3  
Orchard View II Project Vicinity Map**





Figure 4  
Proposed Orchard View I Tentative Subdivision Map

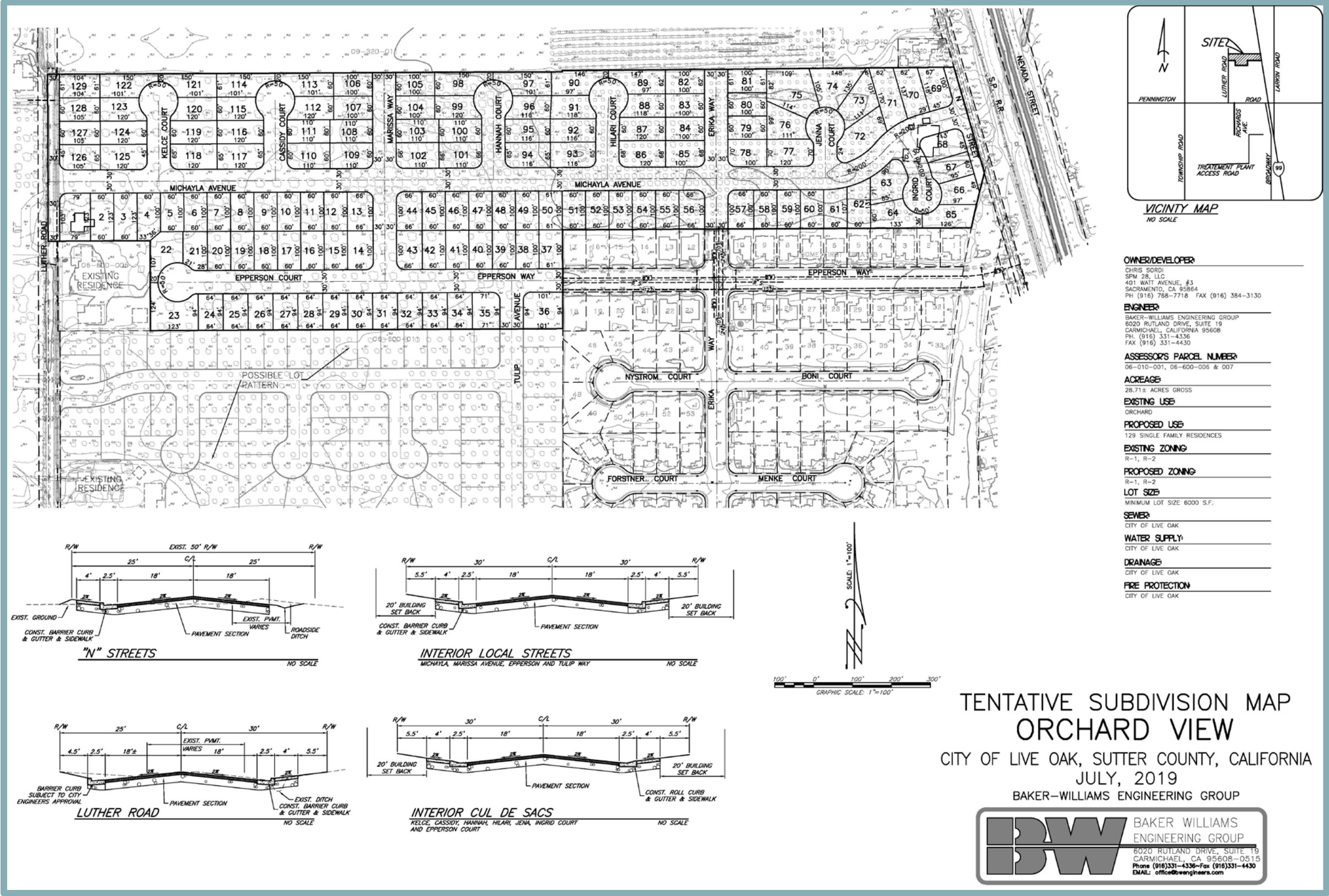
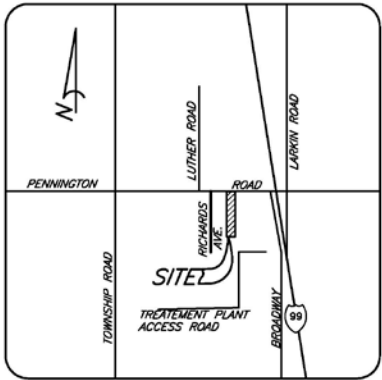
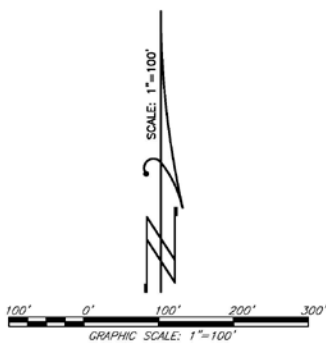
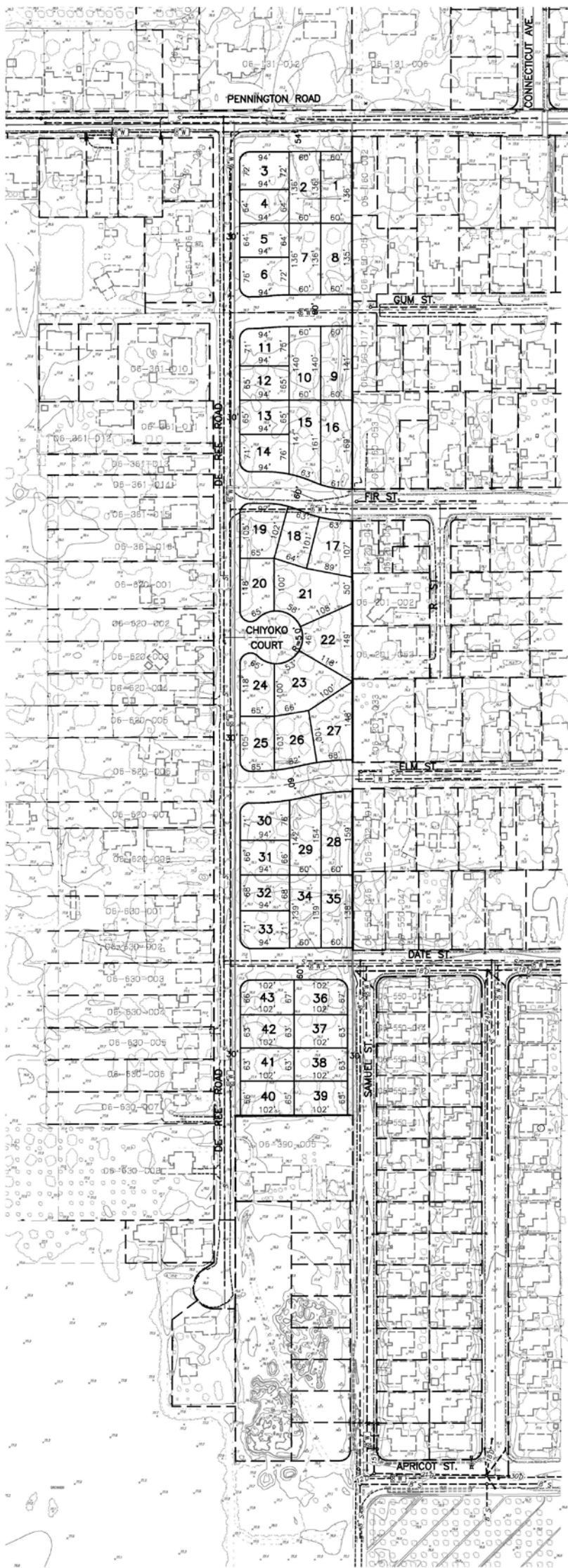




Figure 5  
Proposed Orchard View II Tentative Subdivision Map



TENTATIVE SUBDIVISION MAP  
ORCHARD VIEW II  
CITY of LIVE OAK, SUTTER COUNTY, CALIFORNIA  
JUNE, 2019  
BAKER-WILLIAMS ENGINEERING GROUP

**OWNER/DEVELOPER:**  
CHRIS SORDI  
DEREE ROAD QUAIL HOLLOW LP  
401 WATT AVENUE #3  
SACRAMENTO, CALIFORNIA 95864  
PH (916) 768-7718 FAX (916) 384-3130

**ENGINEER:**  
BAKER-WILLIAMS ENGINEERING GROUP  
6020 RUTLAND DRIVE, SUITE 19  
CARMICHAEL, CALIFORNIA 95608  
PH. (916) 331-4336  
FAX (916) 331-4430

**ASSESSOR'S PARCEL NUMBER:**  
06-400-002, 003, & 004

**ACREAGE:**  
9.68± ACRES GROSS

**EXISTING USE:**  
1 SINGLE FAMILY RESIDENCE & ORCHARD

**PROPOSED USE:**  
43 SINGLE FAMILY RESIDENCES

**EXISTING ZONING:**  
R-1

**PROPOSED ZONING:**  
R-1

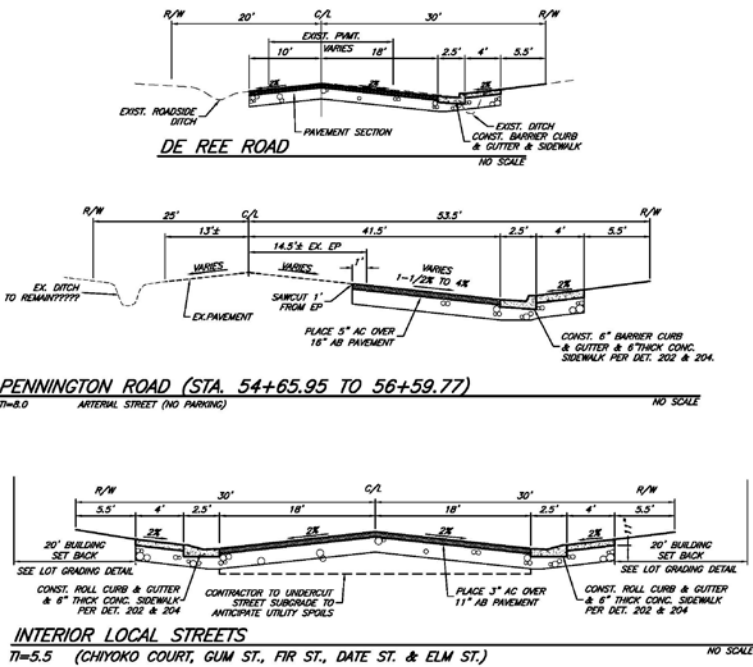
**LOT SIZE:**  
MINIMUM LOT SIZE 6000 S.F.

**SEWER:**  
CITY OF LIVE OAK

**WATER SUPPLY:**  
CITY OF LIVE OAK

**DRAINAGE:**  
CITY OF LIVE OAK

**FIRE PROTECTION:**  
CITY OF LIVE OAK





BAKER WILLIAMS  
ENGINEERING GROUP  
6020 RUTLAND DRIVE, SUITE 19  
CARMICHAEL, CA 95608-0515  
Phone (916) 331-4336-Fax (916) 331-4430  
EMAIL: office@bwengineers.com

## **Discretionary Actions**

The proposed project would require the following approvals from the City of Live Oak:

- Approval of this Initial Study/Mitigated Negative Declaration;
- Adoption of a Mitigation Monitoring and Reporting Plan (MMRP);
- Approval of a Tentative Subdivision Map to subdivide the Orchard View I site into 129 single-family lots; and
- Approval of a Tentative Subdivision Map to subdivide the Orchard View II site into 43 single-family lots.

## **G. ENVIRONMENTAL CHECKLIST**

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

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

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

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

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

## **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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### **Discussion**

- a,b. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. 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. According to the Live Oak 2030 General Plan, scenic vistas are not located in the vicinity of the project sites. In addition, according to the California Scenic Highway Mapping System, the project site is not located within the vicinity of an officially designated State Scenic Highway. Scenic resources, including rock outcroppings or historically significant buildings, do not exist on either project site.

Furthermore, the proposed project would be consistent with the project sites' Live Oak 2030 General Plan land use and zoning designations. Thus, the project would not result in new impacts to any scenic vistas or roadways or substantially more severe impacts than what has been anticipated for the site and analyzed in the General Plan EIR. Therefore, because the proposed project would not result in development in proximity to any State scenic highways, scenic resources, or scenic vistas, development of the proposed 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. The proposed project would include the construction of a total of 172 single-family residences on 38 acres of land. The project sites are currently used as orchards, but the proposed use of the sites for residential purposes would be consistent with the Live Oak 2030 General Plan land use designations of Smaller-Lot Residential and Low-Density Residential, as well as with the zoning designations of R-1 and R-2. The sites are located in urbanized areas, bordered by other single-family residential developments. As such, the proposed would be consistent with existing development in the area.

In addition, the proposed project would be required to comply with all applicable goals and policies in the Live Oak 2030 General Plan. For example, the following Live Oak 2030 General Plan goals and policies, designed to maintain the visual character of surrounding



developments and add value to the Live Oak communities, would be applicable to the proposed project:

- Policy DESIGN-4.1: Residential sites and building frontages should create an attractive, pedestrian-friendly environment along neighborhood streets.
- Policy DESIGN-5.3: New residential projects should provide diversity among dwelling units in the use of color, building materials, floor plan layouts, square footages, and rooflines. Projects should maintain continuity of overall design features to provide context between individual units in the neighborhood.

Compliance with the Live Oak 2030 General Plan goals and policies listed above would ensure that the proposed project is designed consistent with the visual character of surrounding residential development. In addition, the proposed project would be required to comply with the standards set forth for R-1 and R-2 Districts, including limiting the height of two-story structures to 30 feet. Furthermore, all future homes would be required to comply with the Citywide Design Guidelines, which are intended to provide guidance for orderly development of the City and supplement the Live Oak Zoning Regulations on matters of design and aesthetics.

Based on the above, implementation of the project would not conflict with applicable zoning and other regulations governing scenic quality, and the proposed project would have a ***less-than-significant*** impact.

- d. The existing on-site orchards do not include any sources of light. However, the area surrounding both project sites include residential uses and roadways that do include sources of light. The proposed residential uses and internal street systems would introduce new sources of light, including outdoor street lighting, residential lighting, glare from windows, and light associated with vehicles entering and exiting the sites. The new sources of lighting would be required to be designed consistent with all applicable goals and policies of the 2030 Live Oak General Plan and the standards set forth in the City's Municipal Code related to light and glare. For example, the following Live Oak 2030 General Plan goals and policies that are designed to minimize impacts resulting from new sources of substantial light or glare, as well as encourage building orientations and landscaping that enhance natural lighting and sun exposure, would be applicable:

- Policy DESIGN-14.5: The City will require that new lighting fixtures in new development areas cast light downward toward the ground and reduce spillover light. Existing light fixtures requiring replacement or repair shall be upgraded so they also cast light downward.
- Policy DESIGN-14.6: Exterior building materials in new development areas shall be composed of a minimum 50% low-reflectance, non-polished finishes and bare metallic surfaces found on infrastructure such as pipes, poles, etc., shall be painted to minimize reflectance and glare.

Municipal Code Section 17.70.240 (D) sets performance standards for glare and requires new developments to abide by the following:

1. Mirrored or highly reflective glass shall not cover more than 20 percent of a building surface visible from a street unless an applicant submits surface information demonstrating to the satisfaction of the community development

director that use of such glass would not significantly increase glare visible from adjacent streets and property or pose a hazard for moving vehicles.

Compliance with such Live Oak 2030 General Plan policies and the standards set forth in the Municipal Code would ensure that the light and glare created by the proposed project would not adversely affect day or nighttime views in the area. As a result, a ***less-than-significant*** impact would occur.

## II. AGRICULTURE AND FOREST RESOURCES.

*Would the project:*

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	E 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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### Discussion

a,e. The Orchard View I and Orchard View II sites are both currently used as orchards. Orchard View II is surrounded by residential uses on all sides. Per the Department of Conservation's Important Farmland Finder, the site is designated Urban and Built-up Land.<sup>1</sup> As such, development of the proposed residences on the Orchard View II site would not convert designated Farmland to non-agricultural use.

Orchard View I is primarily surrounded by agricultural land, with some residential development to the southeast and southwest. Per the Department of Conservation's Important Farmland Finder, the Orchard View I site is designated Farmland of Statewide Importance and Unique Farmland.<sup>2</sup> Because the proposed project would involve developing the site for residential uses, the project would convert designated Farmland of Statewide Importance and Unique Farmland to non-agricultural use. However, the Live Oak 2030 General Plan does not designate the project site for agricultural use, and instead identifies the project site for residential development. In addition, the project site is zoned for residential development. Per Public Resources Code (PRC) Section 21083.3, if a development project is consistent with the local general plan and zoning, the environmental analysis should be limited to effects on the environment which are peculiar to the parcel or to the project and which were not addressed as significant effects in the prior EIR.

The General Plan EIR evaluated the impacts of Farmland conversion that would result from buildout of the Live Oak 2030 General Plan, including the project sites, and determined that impacts would remain significant and unavoidable even with implementation of Live Oak 2030 General Plan goals and policies aimed at preserving agricultural lands, as feasible mitigation measures do not exist to reduce the loss of

<sup>1</sup> California Department of Conservation. *California Important Farmland Finder*. Available at: [maps.conservation.ca.gov/DLRP/CIFF/](https://maps.conservation.ca.gov/DLRP/CIFF/). Accessed February 2020.

<sup>2</sup> *Ibid.*

agricultural land to a less-than-significant level. The Live Oak City Council adopted a Statement of Overriding Considerations for the loss of prime agricultural land resulting from adoption of the Live Oak 2030 General Plan and EIR. Therefore, conversion of agricultural land within the project site has been previously anticipated by the City.

Given the fact that the General Plan EIR assumed buildout of the project sites for residential development, and the project would be consistent with the Live Oak 2030 General Plan designation for the sites, the conversion of Unique Farmland and Farmland of Statewide Importance on the Orchard View I site was already evaluated and considered in the General Plan EIR analysis. The proposed project would not result in any new, or increase in the severity of, the impacts already identified in the General Plan EIR. Therefore, the project's impact related to the conversion of Farmland to non-agricultural use would be considered ***less than significant***.

- b. The Orchard View I site is designated Low-Density Residential and zoned R-1. The Orchard View II site is designated Smaller-Lot Residential and zoned R-2. Neither project site is under a Williamson Act contract, and thus, buildout of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and ***no impact*** would occur.
- c,d. The project sites are 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]). As noted above, the project sites are currently used for orchards. Orchard View I is zoned R-1 and Orchard View II is zoned R-2. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and the project would not otherwise result in the loss of forest land or conversion of forest land to non-forest use. Thus, ***no impact*** would occur.

### 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?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### Discussion

- a,b. The City of Live Oak is within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Feather River Air Quality Management District (FRAQMD). 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<sub>x</sub>), and lead. At the federal level, the South Sutter portion of the FRAQMD's jurisdiction has been designated as severe nonattainment under the 1997 and 2008 National AAQS for eight-hour ozone, as well as nonattainment under the 2015 National AAQS for eight-hour ozone. Aside from the South Sutter portion of the FRAQMD's jurisdiction, the remaining areas are designated as attainment for the federal eight-hour ozone standard. The Yuba City-Marysville portion of the FRAQMD's jurisdiction is designated as a maintenance area under the National AAQS for PM with diameters less than 2.5 microns (PM<sub>2.5</sub>). Under the California AAQS designations, the South Sutter portion of the FRAQMD's jurisdiction is under nonattainment for the one-hour ozone standard, while the remaining portion of the jurisdiction is classified as nonattainment-transitional. FRAQMD's entire jurisdiction is designated as nonattainment-transitional for eight-hour ozone under the California AAQS, and as nonattainment for PM with diameters less than 10 microns (PM<sub>10</sub>). FRAQMD's jurisdictional area is designated as attainment or unclassified for all other National and California AAQS.

Due to the nonattainment designations, FRAQMD, 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<sub>2.5</sub> Implementation/Maintenance Plan and Re-designation Request for Sacramento PM<sub>2.5</sub> Nonattainment Area* (PM<sub>2.5</sub> Implementation/Maintenance Plan), and the 1991 Air Quality Attainment Plan (AQAP), including triennial reports. In addition to the foregoing plans related to attainment statuses in the SVAB, the FRAQMD is also party to the *Northern Sacramento Valley Planning Area 2015 Triennial Air Quality Attainment Plan*, which was specifically developed to cover the Planning Areas of Shasta, Tehama, Glenn, Butte, Colusa, and Feather River. 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 SVAB region have the potential to generate air pollutants that may increase the difficulty of attaining federal and State AAQS. Therefore, for most projects, evaluation of air quality impacts is required to comply with CEQA. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, FRAQMD has developed the *Indirect Source Review Guidelines*, which includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors and PM<sub>10</sub>, as the area is under nonattainment for ozone and PM<sub>10</sub>.

The FRAQMD's recommended thresholds for the ozone precursors reactive organic gases (ROG) and NO<sub>x</sub> specify that emissions during construction of proposed projects shall not exceed 4.5 tons per year (tons/year) or 25 pounds per day (lbs/day). For operational emissions, the thresholds of significance for ROG and NO<sub>x</sub> are 25 lbs/day. The FRAQMD's recommended thresholds of significance for ROG and NO<sub>x</sub>, as well as PM<sub>10</sub> are summarized in Table 1 below.

<b>Table 1</b>			
<b>FRAQMD Thresholds of Significance</b>			
<b>Pollutant</b>	<b>Construction Thresholds (tons/year)</b>	<b>Construction Thresholds (lbs/day)</b>	<b>Operational Thresholds (lbs/day)</b>
NO <sub>x</sub>	4.5	25	25
ROG	4.5	25	25
PM <sub>10</sub>	N/A	80	80
<b>Source: FRAQMD, June 7, 2010.</b>			

If the proposed project's emissions exceed the pollutant thresholds presented in Table 1, the project could conflict with or obstruct implementation of the applicable air quality plan.

The proposed project's construction-related and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2016.3.2 – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's modeling assumed the following:

- Project construction was assumed to start in March of 2020;
- Construction is anticipated to occur over approximately three years;
- The entire 38.38-acre site would be graded;
- The CO<sub>2</sub> intensity factor was adjusted based on PG&E's Renewable Portfolio Standards (RPS) projections;
- In compliance with the 2019 California Building Standards Code (CBSC), 100 percent of electricity would be generated on-site; and
- The project would include pedestrian connections throughout the site and connecting off-site.

All CalEEMod results are included in the appendix to this IS/MND.

### Construction Emissions

According to the CalEEMod results, implementation of the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 2 below.

<b>Table 2</b> <b>Maximum Unmitigated Construction Emissions</b>					
<b>Pollutant</b>	<b>Project Emissions (lbs/day)</b>	<b>Project Emissions (tons/year)</b>	<b>Threshold of Significance (lbs/day)</b>	<b>Threshold of Significance (tons/year)</b>	<b>Exceeds Threshold?</b>
NO <sub>x</sub>	50.27	3.59	25	4.5	<b>YES</b>
ROG	15.87	2.03	25	4.5	<b>NO</b>
PM <sub>10</sub>	20.41	0.72	80	N/A	<b>NO</b>
<i>Source: CalEEMod, February 2020 (see appendix).</i>					

As shown in Table 2, construction emissions of ROG and PM<sub>10</sub> would be below the applicable FRAQMD thresholds of significance. However, emissions of NO<sub>x</sub> would be above the applicable lbs/day threshold of significance.

It should be noted that the FRAQMD recommends that all projects implement the following standard mitigation measures:

1. Implement the Fugitive Dust Control Plan.
2. Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringelmann 2.0).
3. The contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained prior to and for the duration of on-site operation.
4. Limiting idling time to 5 minutes.
5. Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
6. Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.
7. Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require California Air Resources Board (CARB) Portable Equipment Registration with the State or a local district permit. The owner/operator shall be responsible for arranging appropriate consultations with the CARB or FRAQMD to determine registration and permitting requirements prior to equipment operation at the site.

Compliance with the measures above was not directly included in the CalEEMod emissions estimates for the proposed project; thus, the emissions estimates presented in Table 2 likely represent a conservative estimate, and implementation of the foregoing FRAQMD measures would slightly reduce emissions from the amounts presented in Table 2.



Considering that construction emissions of NO<sub>x</sub> would be above FRAQMD's threshold of significance, construction of the proposed project could have the potential to contribute to the FRAQMD's nonattainment status of ozone, and a potentially significant impact could occur.

### Operational Emissions

Based on the CalEEMod results, operation of the proposed project would result in maximum unmitigated criteria air pollutant emissions as shown in Table 3.

<b>Table 3</b>			
<b>Maximum Unmitigated Operational Emissions (lbs/day)</b>			
<b>Pollutant</b>	<b>Proposed Project Emissions</b>	<b>Threshold of Significance</b>	<b>Exceeds Threshold?</b>
NO <sub>x</sub>	28.48	25	<b>YES</b>
ROG	276.31	25	<b>YES</b>
PM <sub>10</sub>	56.05	80	<b>NO</b>
<i>Source: CalEEMod, February 2020 (see appendix).</i>			

As shown above, operational emissions of PM<sub>10</sub> would be below the FRAQMD's applicable thresholds of significance. As such, operation of the proposed project would not have the potential to contribute to the FRAQMD's nonattainment status for PM. However, emissions of NO<sub>x</sub> and ROG would exceed the applicable threshold of significance. Consequently, implementation of the proposed project would have the potential to contribute to the FRAQMD's nonattainment status for ozone during operations, resulting in a potentially significant impact.

### Cumulative Emissions

Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. Due to the nonattainment designations discussed above, FRAQMD, along with other air districts in the SVAB region have developed and adopted plans to attain federal and State AAQS. A project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Project's that are inconsistent with attainment plans may result in cumulatively considerable contributions to regional violations of federal or State AAQS.

As presented above, the proposed project would result in emissions that would exceed the FRAQMD thresholds of significance for NO<sub>x</sub> during construction and for NO<sub>x</sub> and ROG during operations. As such, the proposed project would have the potential to result in a cumulatively considerable net increase in ozone precursor emissions, which the project area is currently in nonattainment.

### Conclusion

Based on the above, construction and operation of the proposed project would have the potential to violate AAQS for NO<sub>x</sub> and ROG, and/or result in a cumulatively considerable



net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state AAQS, and a **potentially significant** impact related to air quality would occur.

### Mitigation Measure(s)

Implementation of Mitigation Measure III-1 would ensure that construction emissions of NO<sub>x</sub> would not exceed the applicable FRAQMD lbs/day threshold of significance. Following implementation of Mitigation Measure III-1, construction emissions would be reduced as shown in Table 4.

<b>Table 4</b> <b>Mitigated Construction Emissions (lbs/day)</b>			
<b>Pollutant</b>	<b>Proposed Project Emissions</b>	<b>Threshold of Significance</b>	<b>Exceeds Threshold?</b>
NO <sub>x</sub>	24.99	25	<b>NO</b>
ROG	15.87	25	<b>NO</b>
PM <sub>10</sub>	20.41	80	<b>NO</b>
<i>Source: CalEEMod, February 2020 (see appendix).</i>			

Implementation of Mitigation Measure III-2 would reduce operational emissions of NO<sub>x</sub> and ROG to the levels shown in Table 5. As show in the table, the operational emissions of NO<sub>x</sub> and ROG would be sufficiently reduced to below the applicable FRAQMD thresholds of significance.

<b>Table 5</b> <b>Mitigated Operational Emissions (lbs/day)</b>			
<b>Pollutant</b>	<b>Proposed Project Emissions</b>	<b>Threshold of Significance</b>	<b>Exceeds Threshold?</b>
NO <sub>x</sub>	23.34	25	<b>NO</b>
ROG	13.08	25	<b>NO</b>
PM <sub>10</sub>	10.49	80	<b>NO</b>
<i>Source: CalEEMod, February 2020 (see appendix).</i>			

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

**III-1** *Prior to approval of any grading plans, the project applicant shall show on the plans via notation that the contractor shall ensure that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet average 50.3 percent NO<sub>x</sub> reduction compared to the year 2020 California Air Resources Board (CARB) fleet average. This reduction can be achieved by selecting a combination of Tier 3 and Tier 4 construction equipment.*

*In addition, all off-road equipment operating at the construction site must be maintained in proper working condition according to manufacturer's specifications.*

*III-2           Hearths or similar devices, including wood and natural gas fireplaces, shall be prohibited in all proposed homes throughout the project area. The prohibition shall be included on any project plans submitted prior to issuance of building permits, subject to review and approval by the City's Planning Department.*

- 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 Orchard View I site would be the single-family residences located southeast and southwest of the site. For the Orchard View II site, the nearest sensitive receptors would be the residences along the eastern border of the site.

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

### **Localized CO Emissions**

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

The FRAQMD does not recommend specific methodologies for use in the analysis of localized CO emissions. However, several nearby air districts maintain recommended screening protocols to determine whether a proposed project would have the potential to result in excess concentrations of CO. Based on the expectation that high levels of localized CO would only occur where background levels of traffic congestion are high, the nearby Placer County Air Pollution Control District (PCAPCD), Sacramento Metropolitan Air Quality Management District (SMAQMD), and Yolo-Solano Air Quality Management District (YSAQMD) consider projects that do not result in the degradation of traffic operations at any intersections from acceptable levels of service (LOS) to unacceptable LOS or result in the addition of a substantial amount of new traffic to intersections already operating at unacceptable LOS to not result in high levels of localized CO, and further analysis is not required. As discussed in further depth in Section XVII, Transportation, of this IS/MND, the proposed project is anticipated to result in a relatively small amount of new vehicle trips at each project site. Because the proposed project would be consistent with the land use designations for the sites, the increase in traffic associated with buildout of the sites was already anticipated and analyzed in the General Plan EIR, including any associated localized CO emissions. According to the General Plan EIR, following buildout of the Live Oak 2030 General Plan, all City roadways would remain operating at acceptable LOS with the exception of one segment, Kola Street from N Street to State

Route (SR) 99, which is not located near the project sites. Implementation of the Live Oak 2030 General Plan is anticipated to result in four segments along SR 99 operating at LOS F, none of which are located within the vicinity of the project sites. The increase in traffic due to buildout of the proposed project has already been anticipated, analyzed, and accounted for in regional planning efforts. The project would not involve any operations that could result in increased levels of CO concentrations from what is already expected due to buildout of the project sites. Consequently, the proposed project would not be anticipated to result in high levels of localized CO per the screening criteria used by nearby air districts.

Furthermore, development of the project sites has been previously anticipated by the City and analyzed in the EIR prepared for the Live Oak 2030 General Plan. As discussed in Impact 4.3-4 of the General Plan EIR, buildout of the City, including the project sites, would not result in impacts related to localized CO concentrations. Because buildout of the project sites was previously analyzed in the General Plan EIR, and the proposed project is consistent with the Live Oak 2030 General Plan land use designations, the proposed project would not be anticipated to result in any impacts related to CO not previously anticipated in the General Plan EIR.

Considering the amount of new vehicle trips that would occur as a result of implementation of the proposed project, and considering that buildout of the project sites has been previously analyzed in the General Plan EIR, which concluded that buildout of the City would not result in impacts related to localized CO, operation of the proposed project would not be expected to result in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

### **TAC Emissions**

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. The nearest sensitive receptors to Orchard View I are the single-family residences located southwest and southeast of the site, the closest being approximately 25 feet from the site. The nearest sensitive receptors to the Orchard View II site are the residences approximately 25 feet to the east.

The proposed project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. As such, the proposed 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 proposed project. The exposure period typically analyzed in health risk

assessments is 30 years or greater, which is substantially longer than the anticipated construction period associated with the proposed project.

In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies. Thus, off-road diesel vehicles used during construction of the proposed project would be required to comply with statewide emissions reductions targets, which would minimize the amount of DPM emitted by construction equipment operating within each project site.

Furthermore, only portions of each project site would be disturbed at a time during construction. Operation of construction equipment would occur on such portions of the site intermittently throughout the course of a day over the overall construction period. Section 9.30.020 of the City's Municipal Code prohibits construction activities between 10:00 PM and 7:00 AM; thus, construction equipment would not be continually operated within the project sites. Because construction equipment on-site would not operate continuously within the project sites, would only be operated during the relatively short construction period of the project, and would be used at varying locations within the site, associated emissions of DPM would be limited and off-site concentrations would be low and variable. DPM is highly dispersive in the atmosphere. Thus, emissions at the project sites would be substantially dispersed at the nearest sensitive receptor.

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

### **Conclusion**

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

- d. Emissions such as those leading to odor have the potential to adversely affect people. Emissions of principal concern include emissions leading to odors, emission that have the potential to cause 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 are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an odor impact is dependent on a number of variables including: the nature of the odor source; the frequency of odor generation; the intensity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor.

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

Construction activities often include diesel-fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction activities would be temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours per Section 9.30.020 of the Municipal Code, and would likely only occur over portions of the site at a time. In addition, all construction equipment and operation thereof would be regulated per the CARB's In-Use Off-Road Diesel Vehicle Regulation. Considering the short-term nature of construction activities, as well as the regulated and intermittent nature of the operation of construction equipment, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

As noted previously, the proposed project would be required to implement the FRAQMD's standard mitigation measures, including implementation of a Fugitive Dust Control Plan. Measures included in the Fugitive Dust Control Plan would act to reduce construction-related dust, and could include: ensuring that haul trucks with loose material are covered, reducing vehicle dirt track-out, and limiting vehicle speeds within project site. Following project construction, all areas of the project site not developed with structures would be either paved or landscaped. Thus, project operations would not generate significant amounts of dust that could adversely affect a substantial number of people.

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

#### **IV. BIOLOGICAL RESOURCES.**

*Would the project:*

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

#### **Discussion**

- a. Special-status species include plant and wildlife species that are listed as endangered or threatened, or are candidates for this listing under the Federal and State Endangered Species Acts. Special-status species are defined as follows:

- Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act (FESA);
- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act (CESA);
- Plant species that are on the California Rare Plant Society (CNPS) Rank 1 and 2;
- Animal species that are designated as Species of Special Concern or Fully Protected by the California Department of Fish and Wildlife (CDFW); and
- Species that meet the definition of rare, threatened, or endangered under Section 15380 of the CEQA guidelines.

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.

Currently, the project sites serve as orchards and are used for agricultural land. Regular maintenance and cultivation activities associated with orchards disturb the site and discourage wildlife habitation. Because the project sites are disturbed, the potential for special-status species to occur on-site is low. Nonetheless, given that the sites are not currently developed with impervious surfaces, Raney Planning & Management, Inc.



conducted a search of the California Natural Diversity Database (CNDDDB) maintained by the CDFW for the project quadrangle, the Gridley quadrangle, in order to identify documented occurrences of special-status species in the vicinity of the project area. Each species identified by CNDDDB within the Gridley quadrangle was evaluated to determine the location of the species relative to each project site, as well as whether the site meets the habitat requirements of each species.

Based on the results of the CNDDDB search, a total of 20 special-status plant species have been documented in the project area. However, due to the habitat requirements of such species (i.e., meadow and seep, chenopod scrub, chaparral, coastal prairie, marsh, swamp, etc.), none are likely to occur on either project site. In addition, the project sites are highly disturbed due to regular orchard maintenance and the cultivation of crops. Due to the disturbed nature of the sites and the absence of potentially suitable habitat, special-status plants are not anticipated to be present on either site. Thus, the proposed project would not result in substantial adverse effects to special-status plant species.

Of the 26 special-status wildlife species that were identified to occur in the project region, 20 are unlikely to occur on either project site due to habitat requirements, including, but not limited to, aquatic features, forest, marsh, and chaparral. However, the existing on-site trees and grassland could provide potential nesting and/or foraging habitat for Swainson's hawk, as well as other bird species protected by the MBTA, including the burrowing owl and northern harrier. In addition, pallid bat, Townsend's big-eared bat, and western mastiff bat have the potential to roost in on-site tree cavities.

Based on the above, the proposed project would not result in any impacts to special-status plant species; however, the potential exists for construction activities to result in adverse effects to select special-status wildlife species. Therefore, the proposed project could result in a ***potentially significant*** impact related to species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or U.S. Fish and Wildlife Service.

### **Mitigation Measure(s)**

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

#### *Swainson's Hawk*

*IV-1a      A pre-construction nesting bird survey shall be conducted on-site within 15 days prior to construction if construction associated with the project would commence during the nesting season (February 1<sup>st</sup> to September 30<sup>th</sup>). Results of the pre-construction survey shall be submitted to the City's Planning Department. If disturbance associated with the project would occur outside of the nesting season, surveys shall not be required.*

*If Swainson's hawk are identified as nesting on the project site, a non-disturbance buffer of 75-feet shall be established or as otherwise prescribed by a qualified ornithologist. 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 ornithologist has determined that the young have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.*

- IV-1b      *The project proponent shall be responsible for mitigating the loss of potential foraging habitat on the project site at a ratio of 0.75:1, as per the CDFW's 1994 Guidance on Swainson's Hawk Mitigation. A record of the compensatory mitigation shall be submitted to the City of Live Oak Planning Department prior to initiation of ground-disturbing activities.*

*MBTA Protected Species*

- IV-2      *During construction of the proposed project, the project applicant shall implement the following measures to avoid or minimize impacts to protected migratory bird species:*

- *If any site disturbance or construction activity for any phase of development is scheduled to begin between February 1 and September 30, a qualified biologist shall conduct a preconstruction survey for active tree nests and ground nests from publicly accessible areas within 14 days prior to site disturbance for any phase of development. The survey area shall cover the construction site and a 100-foot radius surrounding the construction site. The preconstruction survey results shall be submitted to the City's Planning Department for review. If no nesting migratory birds are found, then further mitigation measures are not necessary.*
- *If an active nest of a MBTA bird, or other CDFW-protected bird is discovered that may be adversely affected by any site disturbance, or an injured or killed bird is found, the project applicant shall immediately:*
  - *Stop all work within a 100-foot radius of the discovery.*
  - *Notify the City's Planning Department.*
  - *Do not resume work within the 100-foot radius until authorized by the biologist.*
  - *The biologist shall establish a minimum 100-foot Environmentally Sensitive Area (ESA) around the nest. The ESA may be reduced if the biologist determines that a smaller ESA would still adequately protect the active nest. Further work may not occur within the ESA until the biologist determines that the nest is no longer active.*

*Roosting Bats*

- IV-3      *The project applicant shall implement the following measures prior to initiation of tree removal:*

- *A qualified biologist shall conduct a pre-construction survey for roosting bats at the project site within 14 days prior to initiation of tree removal at the project site.*
- *Survey results shall be submitted to the City of Live Oak. If active maternity bat roosts are not found within the survey area, further mitigation is not required.*
- *If active bat roosts are found, the biologist shall identify a suitable construction-free buffer around the maternity roost. An example of*



*a suitable construction free buffer is 50 feet; however, each buffer distance should be determined on a case-by-case basis by the qualified biologist. The buffer shall be identified on the ground with flagging or fencing, and shall be maintained until a qualified biologist has determined that the tree and snag impacts would not adversely affect bat survival or survival of their young.*

- b,c. Both the Orchard View I and Orchard View II sites currently consist of orchards and land that is used for agricultural purposes. Wetlands, riparian habitat, and other aquatic resources do not currently exist on either project site. Therefore, the proposed project would not have a substantial adverse effect on any riparian habitat, sensitive natural communities, or federally protected wetlands, and a **less-than-significant** impact would occur.
- d. Neither project site offers or is adjacent to any prime habitat such as wetlands, riparian, or forest, and, as such, the potential for use of the sites as wildlife corridors or native wildlife nursery sites is limited. In addition, the Orchard View II site is entirely surrounded by roadways and residential development, and therefore, does not support any wildlife movement corridors. The Orchard View I site has railroad tracks to the east, residential uses to the southwest and southeast, and Luther Road to the west. The developed nature of the project sites discourages use of the sites as a wildlife corridors or native wildlife nursery sites. 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. While wildlife could currently move through the sites, particularly the Orchard View I site due to the other undeveloped areas to the north and east, the project sites do not serve as major movement corridors. In addition, due to the undeveloped nature of the areas to the north and east of the Orchard View I site, sufficient land for wildlife to move around development on the site would remain.

Based on the above, development of the proposed project would not substantially interfere 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, and a **less-than-significant** impact would occur.

- e. Both the Orchard View I and Orchard View II site contain cultivated trees. Implementation of the proposed project would include removal of the existing trees to provide for improvements associated with access to the site and the proposed residences. The City of Live Oak does not have an adopted tree protection ordinance; however, General Plan Policy Biological-2.1 mandates the preservation of native oak trees. The project sites do not contain any native oak trees, and therefore, removal of the on-site trees would not conflict with the Live Oak 2030 General Plan policy protecting trees. Because the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, the project's impact would be **less than significant**.
- f. The City of Live Oak has not adopted a habitat conservation plan, natural conservation community plan, or other approved local, regional, or state habitat conservation plan. The City will be a participant of the Yuba-Sutter Regional Conservation Plan, but preparation of the Plan is still in progress, and a tentative date of completion is not known. Because an approved habitat conservation plan does not exist, the project would result in **no impact**.

## 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?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

- a. 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.

Currently, the sites are used as orchards. Thus, the sites do not contain existing structures or other features which would be considered historical. Furthermore, a records search of the California Historic Resources Information System (CHRIS) was performed by the Northeast Information Center (NEIC) for cultural resource site records and survey reports within the project area.<sup>3</sup> The NEIC concluded that the project sites do not contain any recorded historic buildings or structures on any lists of historic resources. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5, and a **less-than-significant** impact would occur.

- b,c. A records search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the project site area and returned negative results for containing any known Native American cultural resources.<sup>4</sup> Furthermore, the General Plan EIR determined prehistoric sites would likely be located along a waterway, such as the Sutter Butte Canal or the Feather River, neither of which are located near the project area. While the potential for resources to be discovered on the project sites is low, previously unrecorded archaeological resources, including human remains, could be discovered during ground-disturbing activities related to project construction. If previously unknown resources are encountered during construction activities, the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of dedicated cemeteries. Therefore, impacts could be considered **potentially significant**.

### Mitigation Measure(s)

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

<sup>3</sup> Northeast Center of the California Historical Resources Information System. *Records Search Results for the Orchard View I and II Subdivision Project, I.C. File #D20-26*. February 27, 2020.

<sup>4</sup> Native American Heritage Commission. *Orchard View I and II Subdivision Project, Sutter County*. March 2, 2020.

- V-1. *In the event of the accidental discovery or recognition of any human remains on the project site, the City 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 until the Sutter County Coroner has been 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. Tribes that are geographically and culturally affiliated with the area will also be contacted to assess if the find is a tribal cultural resource and provide appropriate treatment measures to the City. The potential exists that the Native American Heritage Commission may be unable to identify a most likely descendant, the 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. In such a case, the landowner or their 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 City's Community Development Department. The language of this mitigation measure shall be included on final improvement plans and/or building plans, subject to review and approval by the City.*
- V-2. *In the event a potentially significant cultural resource is encountered during subsurface earthwork activities on the project site, the City shall be notified and all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until an archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the find. Tribes that are geographically and culturally affiliated with the area will also be contacted to assess if the find is a tribal cultural resource and provide appropriate treatment measures to the City. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. A Native American representative and qualified archeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to, culturally appropriate temporary and permanent treatment, which may include avoidance of cultural resources, in-place preservation, and/or re-burial on project property so the resource(s) are not subject to further disturbance in perpetuity. If avoidance is determined to be infeasible, pursuant to CEQA Guidelines Section 15126.4(b)(3)(C), a data recovery plan, which makes provisions for adequately recovering the scientifically*

*consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. If necessary, excavation and evaluation of the finds shall comply with Section 15064.5 of the CEQA Guidelines.*

*Potentially significant cultural resources include, but are not limited to, stone, bone, glass, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the City of Wheatland, the North Central Information Center, and the State Historic Preservation Office (SHPO), as required.*

*The language of this mitigation measure shall be included on final improvement plans and/or building plans, subject to review and approval by the City.*

## **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?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>

## **Discussion**

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

### **California Green Building Standards Code**

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the CBSC, which became effective with the rest of the CBSC on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen 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 CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills; 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, which went into effect on January 1, 2020, build upon energy efficiency measures set forth in the 2016 Building Energy Efficiency Standards and are anticipated to result in an additional reduction in energy consumption from the 2016 Standards. For residential buildings, compliance with the 2019 Building Energy Efficiency Standards would use approximately seven percent less energy due to energy efficiency measures compared to residential buildings built under the 2016 Standards. 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. When rooftop solar energy generation is factored in, structures built under the 2019 Standards would use 53 percent less energy than structures under the 2016 Standards.

### **Construction Energy Use**

Construction of the proposed project would involve on-site energy demand and consumption related to the 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 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 sites would be disturbed at a time, with operation of construction equipment occurring at different locations on the project sites, 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),<sup>5</sup> which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The CARB Diesel Vehicle Regulation described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

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<sup>5</sup> California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.

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

### **Operational Energy Use**

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

The proposed residential project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, high efficacy lighting, and the inclusion of solar panels. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project by PG&E would comply with the State's Renewable Portfolio Standard (RPS), 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. Thus, a portion of the energy consumed during project operations would originate from renewable sources. Furthermore, the inclusion of rooftop solar panels would reduce the demand for grid supplied electricity of the proposed project.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, the General Plan Goal CIRC-2 encourages City-wide improvements to pedestrian and bicycle infrastructure and prioritization of transportation investments, including better access to public transit. As such, future development throughout Live Oak will have improved access to alternative modes of transportation.

### **Conclusion**

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

## **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.	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>

### **Discussion**

ai-aiv. The proposed project sites are not located within the vicinity of an Alquist-Priolo Earthquake Fault Zone, and the City of Live Oak is located in an area of California with relatively low seismic activity. The nearest active fault is the Cleveland Hills Fault, which is located approximately 15 miles northeast of the City of Live Oak.<sup>6</sup> Furthermore, the sites are not located within the vicinity of any steep slopes that would be subject to landslide risk, nor within an area requiring special investigation for landslides or liquefaction hazards. Per the California Geologic Survey, neither site is located within a designated seismic hazard zone for liquefaction or landslides.<sup>7</sup> In addition, the General Plan EIR analyzed the risk of landslides within the project area and determined that the overall risk of landslides in the planning area is low. Thus, liquefaction or landslides would not pose a hazard to on-site structures or future residents.

The CBSC provides minimum standards to ensure that the proposed structures would be designed using sound engineering practices and appropriate engineering standards for the seismic area in which the project sites are located. Projects designed in accordance with the CBSC should be able to:

- 1) Resist minor earthquakes without damage;

<sup>6</sup> California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed February 2020.

<sup>7</sup> *Ibid.*



- 2) Resist moderate earthquakes without structural damage, but with some non-structural damage; and
- 3) Resist major earthquakes without collapse, but with some structural, as well as non-structural, damage.

The CBSC standards protect property and public safety by regulating the design and construction of foundations, building frames, and other building elements. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance with the CBSC can reasonably be assumed to ensure that the proposed structure would be survivable, allowing occupants to safely evacuate in the event of a major earthquake.

Because the project sites are not located within an Alquist-Priolo Fault Zone, would not be subject to strong seismic ground shaking, and would be required to comply with the seismic safety requirements and all other applicable standards set forth in the CBSC, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. Thus, a **less-than-significant** impact would occur.

- b. Issues related to erosion and degradation of water quality during construction are discussed in Section X, Hydrology and Water Quality, of this IS/MND, under question 'a'. As noted therein, the proposed project would not result in substantial soil erosion or the loss of topsoil. Thus, a **less-than-significant** impact would occur.
- c. The proposed project's potential effects related to landslides and liquefaction are discussed under question 'a' above. Potential effects related to lateral spreading and subsidence/settlement are discussed in detail below.

### **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. As discussed above, the project sites do not contain any slopes, nor are the sites located near any open faces that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to pose a risk to the proposed developments is relatively low.

### **Subsidence/Settlement**

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The General Plan EIR determined that the risk of subsidence within the Planning Area would be less-than-significant with compliance with the CBSC. The CBSC includes standards to reduce risks of subsidence/settlement. Given that the proposed project would be built in accordance with the CBSC, the potential for subsidence to pose a risk to the proposed development is relatively low.

### **Conclusion**

Based on the above, the proposed project would not be subject to substantial risks related to liquefaction, landslides, lateral spreading, and subsidence/settlement. Compliance with

standard construction regulations included in the CBSC would ensure that the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction, subsidence, or settlement, and would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site subsidence, liquefaction, or collapse. Thus, a **less-than-significant** impact would occur.

- d. Expansive soils are those possessing clay particles that react to moisture changes by shrinking or swelling. If structures are underlain by expansive soils, foundation systems must be capable of tolerating or resisting any potentially damaging soil movements, and building foundation areas must be properly drained. Based on the Natural Resources Conservation Service's Web Soil Survey, the project sites consist mainly of Conejo-Tisdale complex, with some Gridley clay loam and Liveoak sandy clay loam.<sup>8</sup> The foregoing soils slope from zero to two percent. Conejo-Tisdale complex soil is known to have little shrink-swell potential, but Gridley clay loam and Liveoak sandy clay loam have the potential to be expansive.

Therefore, without further investigation, a **potentially significant** impact could occur related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code, thereby creating substantial direct or indirect risks to life or property.

### **Mitigation Measure(s)**

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

VII-1. *Prior to issuance of a grading permit, the applicant/developer shall incorporate the recommendations of a design-level geotechnical report into project Improvement Plans for review and approval by the City Engineer. Should expansive or otherwise unstable soils be found within the project site, the design-level geotechnical report shall include measures necessary to ensure that such on-site conditions are fully mitigated. Methods of mitigating potential on-site expansive soils may include, but shall not be limited to, the following measures:*

- *Remove and replace potentially expansive soils; and/or*
- *Strengthen foundations (e.g., post-tensioned slab, reinforced mat or grid foundation, or other similar system) to resist excessive differential settlement associated with seismically-induced soil expansion.*

- e. The proposed project would connect to existing City sewer infrastructure. Thus, 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. The General Plan EIR notes that a records search at the University of California Museum of Paleontology indicated that fossil remains have not been found within the Live Oak Planning Area. However, the occurrence of vertebrate fossil remains in sediments found

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<sup>8</sup> Natural Resource Conservation Service, United States Department of Agriculture. *Web Soil Survey*. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed February 2020.

in rock formations throughout Yuba City, Davis, and Woodland suggest that the potential for uncovering additional similar fossil remains during ground disturbing activities exists.<sup>9</sup>

While known paleontological resources do not exist within the project sites, the potential exists for previously undiscovered resources to be found on-site during construction. Thus, ground-disturbing activity, such as grading and trenching, associated with construction of the proposed project, could have the potential to disturb or destroy such resources. Therefore, the proposed project could result in the direct or indirect destruction of a unique paleontological resource, 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.

- VII-2. *Should construction or grading activities result in the discovery of unique paleontological resources, all work within the vicinity of the discovery shall cease. The Community Development Director shall be notified, and the resources shall be examined by a qualified archaeologist or paleontologist, at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist, paleontologist, or historian shall submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.*

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<sup>9</sup> City of Live Oak. *Draft 2030 General Plan EIR* [pg 4.7-15]. 2004.

## **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?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>

### **Discussion**

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

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

Recognizing the global scale of climate change, California has enacted several pieces of legislations in an attempt to address GHG emissions. Specifically, Assembly Bill (AB) 32, and more recently Senate Bill (SB) 32, have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), which was approved in 2008, and updated in 2014 and 2017. The Scoping Plan provides the outline for actions to reduce California's GHG emissions and achieve the emissions reductions targets required by AB 32. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve emissions reductions in line with the Scoping Plan and emissions reductions targets, including AB 32 and SB 32.

The FRAQMD has not yet adopted thresholds of significance to assess potential impacts resulting from project-related GHG emissions. However, several other air districts within California, including PCAPCD, SMAQMD, and Bay Area Air Quality Management District (BAAQMD), have adopted quantitative emissions threshold that may be used in the analysis of GHG emissions from proposed land use projects. Although the quantitative thresholds developed by the aforementioned air districts were developed for use specifically within each district, each district has developed similar thresholds that include bright line mass emissions thresholds of 1,100 MTCO<sub>2</sub>e/yr, as well as efficiency thresholds based on the number of residents anticipated to reside within a proposed residential project upon project completion. A summary of the mass emissions thresholds

and efficiency metrics used in other air districts is presented in Table 6 below. The SMAQMD sets one threshold for both construction and operational phases of land development projects. The BAAQMD recommends comparison of a project's emissions to either the mass emissions thresholds or the efficiency metric presented in Table 6, while the PCAPCD recommends that project-related emissions first be compared to the district's mass emission threshold, and, should project emissions exceed the PCAPCD's mass emission thresholds, emissions should then be compared to the district's efficiency metric.

In the absence of FRAQMD adopted thresholds, the proposed project's GHG emissions have been quantified and compared to the thresholds presented in Table 6 as a means of providing perspective on the intensity and scope of GHG emissions that would result from construction and operation of the proposed project.

<b>Table 6</b>		
<b>Current GHG Thresholds Adopted by Air Districts in California</b>		
<b>Air District</b>	<b>Mass Emissions Thresholds (MTCO<sub>2</sub>e/year)</b>	<b>Efficiency Metric (MTCO<sub>2</sub>e/resident/year)</b>
SMAQMD	1,100	N/A
BAAQMD	1,100	4.6
PCAPCD	1,100/10,000 <sup>1</sup>	4.5/5.5 <sup>2</sup>
<i>Notes:</i>		
<sup>1</sup> The PCAPCD maintains a De Minimis threshold of 1,100 MTCO <sub>2</sub> e/year and a bright line threshold of 10,000 MTCO <sub>2</sub> e/year		
<sup>2</sup> The PCAPCD maintains two efficiency thresholds for residential projects, 4.5 MTCO <sub>2</sub> e/resident/year for projects located within urban areas of Placer County and 5.5 MTCO <sub>2</sub> e/resident/year for projects located within rural areas of the County.		
<b>Source: Placer County Air Pollution Control District. California Environmental Quality Act Thresholds of Significance Justification Report. October 2016.</b>		

The proposed project's GHG emissions were quantified with CalEEMod using the same assumptions as presented in Section III, Air Quality, of this IS/MND, and compared to the thresholds of significance noted above. The proposed project's required compliance with the 2019 Building Energy Efficiency Standards was assumed in the modeling. In addition, the CO<sub>2</sub> intensity factor within the model was adjusted to reflect PG&E's anticipated CO<sub>2</sub> emissions factor for 2024. All CalEEMod results are included in the appendix to this IS/MND.

The estimated GHG emissions resulting from construction of the proposed project are presented in Table 7 below. Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on an annual basis. The thresholds presented in Table 6 are primarily intended for use in analyzing operational GHG emissions, with the exception of PCAPCD's Bright Line threshold of 10,000 MTCO<sub>2</sub>e/yr, which serves as an operational and construction emissions threshold.

<b>Table 7</b> <b>Unmitigated Construction-Related GHG Emissions</b> <b>(MTCO<sub>2</sub>e/yr)</b>	
<b>Construction Year</b>	<b>Project Emissions</b>
2020	425.48
2021	464.27
2022	459.76
2023	282.43
<b>Maximum</b>	<b>464.27</b>
<i>Source: CalEEMod, February 2020 (see appendix).</i>	

The estimated maximum annual construction-related emissions presented in Table 7 would be below the mass emissions thresholds used by nearby air districts. Considering the relatively limited amount of construction-related GHG emissions, construction of the proposed project would not be considered to result in a significant impact on the environment related to GHG emissions.

The estimated maximum annual GHG emissions related to operations of the proposed project are presented in Table 8 below. The emissions levels presented in Table 8 demonstrate that, although project emissions would exceed the annual mass emissions thresholds, the project's emissions factor for project operations of 4.53 MTCO<sub>2</sub>e/yr/resident would be below the efficiency metrics set forth by other air districts. Because the City of Live Oak is relatively small in size, and because the larger Orchard View I site is surrounded by agricultural land, the PCAPCD's rural per capita standard of 5.5 MTCO<sub>2</sub>e/resident/year was used. Thus, based on the standards used by other air districts within the State, operation of the proposed project would not be considered to result in substantial GHG emissions.

<b>Table 8</b> <b>Unmitigated Operational GHG Emissions</b>	
<b>Emission Source</b>	<b>Project Emissions</b>
Area	262.58 MTCO <sub>2</sub> e/yr
Energy	226.91 MTCO <sub>2</sub> e/yr
Mobile	2,110.06 MTCO <sub>2</sub> e/yr
Solid Waste	89.07 MTCO <sub>2</sub> e/yr
Water	24.87 MTCO <sub>2</sub> e/yr
<b>Total Annual GHG Emissions</b>	<b>2,713.50 MTCO<sub>2</sub>e/yr</b>
<b>Emissions Factor</b>	<b>4.53 MTCO<sub>2</sub>e/resident/yr<sup>1</sup></b>
<i>Note:</i> <sup>1</sup> Based on an anticipated future population of 3.48 persons per household (U.S. Census Bureau, 2020) for a total population of 599 residents (2,713.50 MTCO <sub>2</sub> e/yr / 599 residents = 4.53 MTCO <sub>2</sub> e/resident/yr).	
<i>Source: CalEEMod, February 2020 (see appendix).</i>	

In addition to consideration of operational GHG emissions presented above, citywide operational GHG emissions have previously been considered within the General Plan EIR. As discussed in the General Plan EIR, buildout of the Live Oak 2030 General Plan would result in increased citywide GHG emissions. Various policies within the Live Oak 2030 General Plan would contribute to the minimization of GHG emissions resulting from buildout of the City; however, the City's General Plan EIR concluded that increased development within the City resulting from implementation of the Live Oak 2030 General



Plan would result in a significant and unavoidable contribution to global climate change. The proposed project would be required to comply with all applicable Live Oak 2030 General Plan policies and any energy efficiency regulations in place at the time of construction, such as the 2019 Building Energy Efficiency Standards and the CALGreen Code. Compliance with the statewide energy efficiency regulations would help to minimize GHG emissions resulting from operation of the proposed project. In addition, the proposed project would be consistent with the Live Oak 2030 General Plan land use and zoning designations for the project sites. As such, the consideration of Citywide GHG emissions included in the General Plan EIR would have included GHG emissions resulting from buildout of the project sites, and the GHG emissions related to implementation of the proposed project would not be considered new or significantly more severe.

Considering that the proposed project would result in GHG emissions below the efficiency thresholds used by other air districts within the State, and that GHG emissions from the proposed project have been previously considered in the General Plan EIR, the proposed project would not be considered to result in the generation of GHG emissions that would have a significant impact on the environment or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG. Therefore, impacts would be considered ***less than significant***.

## 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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### Discussion

- a. Residential uses do not typically involve the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Future residents may use common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing the use of such products and the amount used on the site, routine use of such products would not represent a substantial risk to public health or the environment. Therefore, the project would have a **less-than-significant** impact with respect to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- b,d. Per the State Water Resources Control Board's (SWRCB) GeoTracker data management system, hazardous materials sites, including leaking underground storage tank (LUST) sites and Department of Toxic Substances Control (DTSC) cleanup sites, have not been identified on or within a 1,000-foot radius of the project area.<sup>10</sup> In addition, neither project site is located on or near any hazardous waste sites identified on the Cortese List.<sup>11</sup>

<sup>10</sup> State Water Resources Control Board. *GeoTracker*. Available at: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=live+oak>. Accessed February 2020.

<sup>11</sup> Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: [https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site\\_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTES+E%29](https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTES+E%29). Accessed February 2020.

The proposed residential uses would not involve any operations that could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. However, hazardous materials would be stored, used, and transported in varying amounts during construction of the proposed project. Construction activities associated with the proposed project would involve use of various products such as concrete, paints, and adhesives, as well as operation of heavy equipment, which would contain fuels and oils. 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 sites 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 and County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Compliance with such regulations would ensure that the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment during construction activities.

Based on the above, the proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and implementation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. As such, a ***less-than-significant*** impact would occur.

- c. The Orchard View II site is not located within 0.25-mile of any schools. The Orchard View I site is located 0.1-mile from Luther Elementary School. While the school is located in close proximity to the Orchard View I site, as discussed above in question 'a', the proposed residential uses would not involve the routine transport, use, or disposal of hazardous materials. Therefore, the project would have a ***less-than-significant*** impact with respect to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- e. A public airport or public use airport does not exist within two miles of the project sites, and the proposed project would be consistent with the planned uses of the sites. Thus, implementation of the proposed project would not result in a safety hazards or excessive noise related to such for people residing or working in the project area, and a ***less-than-significant*** impact would occur.
- f. During operations, the proposed project would provide adequate access for emergency vehicles and would not interfere with potential evacuation or response routes used by emergency response teams. During construction of the proposed project, all construction equipment would be staged on-site so as to prevent obstruction of local and regional travel routes in the City that could be used as evacuation routes during emergency events. In addition, the proposed project would not substantially alter the existing circulation system in the surrounding area. Therefore, the development of the project sites with residential uses would not impair implementation of or physically interfere with an existing emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.
- g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS/MND. As noted therein, the project sites are not located within or near a Very High Fire Hazard

Severity Zone.<sup>12</sup> In addition, according to the General Plan EIR, portions of Live Oak that are urbanized or used for irrigated agricultural practices are not at high risk for wildland fires.<sup>13</sup> Both project sites are surrounded by existing residential development and/or land used for agricultural purposes and, thus, are not at high risk of wildfire. Therefore, implementation of the proposed project would not expose people or structures, either directly or indirectly, to the risk of loss, injury, or death involving wildland fire, and the impact would be ***less than significant***.

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<sup>12</sup> California Department of Forestry and Fire Protection. *Sutter County, Draft Fire Hazard Severity Zones in LRA*. October 3, 2007.

<sup>13</sup> City of Live Oak. *City of Live Oak 2030 General Plan EIR* [pg. 4.15-12]. 2004.

## **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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### **Discussion**

- a. The following discussion provides a summary of the proposed 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 construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality downstream.

The State Water Resources Control Board (SWRCB) adopted a statewide general National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with construction activity. Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the Phase 2 General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to the General Permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation. The General Permit requires development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which describes best management practices (BMPs) to control or minimize pollutants from entering stormwater and must

address non-point source pollution impacts of the development project. The proposed project would include disturbance of the 28.7-acre Orchard View I site and 9.7-acre Orchard View II site, and, thus, would be subject to the relevant requirements within the aforementioned General Permit.

Construction-related BMPs would likely include, but are not limited to, features such as the installation of silt fences, implementation of storm drain inlet protection, installation of fiber rolls, stabilization of construction exits, and proper maintenance of material stockpiles. The project's compliance with the requirements of the SWRCB would ensure that construction activities would not result in degradation of downstream water quality. Therefore, the proposed project would not discharge sediment or urban pollutants through soil erosion, violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality during construction.

### **Operation**

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

The Live Oak 2030 General Plan includes the following policies relevant to the preservation of water quality:

- Police Water-1.1: New development shall incorporate drainage system design that emphasizes infiltration and decentralized treatment to the greatest extent feasible.
- Policy Water-1.3: The City will require development to use best management and design practices to reduce stormwater runoff levels, improve filtration to replenish groundwater, and reduce pollutants close to their source. The City will require new development to use permeable surfaces for hardscape wherever possible. Impervious surfaces such as driveways, streets, and parking lots should be interspersed with vegetated areas that allow for infiltration of stormwater.

The proposed project would be required to comply with the above policies, which would reduce the potential for water quality violations. The final design of the proposed drainage system would be reviewed and approved by the City, which would ensure that the proposed design complies with the applicable policies with respect to incorporating sufficient permanent stormwater treatment control BMPs. In addition, the proposed project is consistent with the planned use for the project sites, and, thus, development of the sites has already been anticipated in the General Plan EIR. The General Plan EIR concluded that compliance with the policies set forth in the Live Oak 2030 General Plan would be sufficient to reduce impacts related to water quality to a less-than-significant level. As such, development of the proposed project would result in a less-than-significant impact related to water quality.

### **Conclusion**

Based on the above, the proposed project would not result in the violation of water quality standards or degradation of water quality during construction or operation, and a **less-than-significant** impact would occur.



- b,e. The City of Live Oak relies entirely on groundwater from the East Butte Groundwater Subbasin, which is part of the Sacramento Valley Groundwater Basin.<sup>14</sup> Sources of groundwater recharge include the Sacramento River, Feather River, Bear River, and deep percolation of precipitation. Per the Sutter County Groundwater Management Plan, the Department of Water Resources does not consider any of the subbasins in Sutter County to be in overdraft conditions,<sup>15</sup> and the general depth to groundwater has remained somewhat stable since the 1940s. The Live Oak 2030 General Plan commits the City of Live Oak to participation in the Sutter County Groundwater Management Plan.

As noted throughout this IS/MND, the proposed project would be consistent with the Live Oak 2030 General Plan land use and zoning designations. Therefore, buildout of the project sites has been previously anticipated and analyzed in the General Plan EIR, and the project would not result in increased use of groundwater supplies beyond what has been anticipated for the site. Per the Live Oak 2030 General Plan, although water demand is expected to increase substantially over time, the City's projected total water demand in the year 2030 would be roughly 0.4 percent of the East Butte Subbasin's total storage capacity. As such, the local groundwater basin has adequate capacity to meet water demand for the foreseeable future, and implementation of the Live Oak 2030 General Plan would not have a long-term substantial adverse effect on groundwater levels or supply in the region. In addition, the proposed project would be required to comply with all applicable policies set forth in the Live Oak 2030 General Plan, including Policy Water-1.1 and 1.3 listed above.

In conclusion, with implementation of Live Oak 2030 General Plan policies and participation in the County's Groundwater Management Plan, the additional demand for water due to buildout of the proposed project would not result in a substantial depletion of groundwater supplies or a significant interference with groundwater recharge. Thus, the proposed project would result in a ***less-than-significant*** impact.

- ci-iii. Implementation of the proposed project would involve the development of 172 residential units and internal circulation roads on two project sites, both of which are currently used as orchards. Such development would increase the amount of impervious surfaces within the project sites. Considering that the amount of impervious surfaces would increase from existing conditions, drainage patterns would change and could increase the rate or amount of runoff on- and off-site.

The project's compliance with SWRCB requirements would ensure that operation of the project would not result in degradation of downstream water quality. Stormwater infrastructure exists in the vicinity of each project site: within Epperson Way for Orchard View I, and within De Ree Road for Orchard View II. Stormwater infrastructure, such as curbs and gutters, within each project site would connect to the existing City stormwater system, in compliance with City standards.<sup>16</sup> The proposed project would be required to comply with all applicable standards set forth within Article VII, Storm Drainage, of the City's Municipal Code. Prior to connection with the City's existing stormwater system, the proposed project would be required to show that stormwater runoff from the project would not result in new or increased flooding impacts on adjoining parcels in upstream and downstream areas, which would be verified by the City as part of their review of final project plans.

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<sup>14</sup> City of Live Oak. *Draft 2030 General Plan EIR: Hydrology and Water Resources* [pg 4.5-18]. 2004.

<sup>15</sup> Sutter County. *Sutter County Groundwater Management Plan*. March 2012.

<sup>16</sup> City of Live Oak. *Storm Drainage System Master Plan*. May 2010.

Because the proposed project is consistent with the Live Oak 2030 General Plan land use and zoning designations for the sites, buildout of the project sites has already been analyzed in the General Plan EIR and accounted for in regional planning efforts. Accordingly, the City's stormwater system design would be based on Live Oak 2030 General Plan buildout assumptions, including buildout of the project sites. The proposed project would not involve any operations that would increase the amount of runoff from the sites from what has already been anticipated.

Based on the above, the proposed project is not anticipated to substantially alter the existing drainage pattern of the site or area through the addition of impervious surfaces in a manner which would result in substantial erosion, substantially increase the rate or amount of surface runoff, or create or contribute to runoff which would exceed the capacity of existing or planned stormwater drainage systems, and the impact would be **less-than-significant**.

- civ. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, neither project site is located within a Special Flood Hazard Area or otherwise located within a 100-year or 500-year floodplain.<sup>17</sup> Therefore, development of the proposed project would not impede or redirect flood flows and **no impact** would result.
- d. As discussed under question 'civ' above, the project sites are not located within a flood hazard zone. 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 sites are not located in proximity to a coastline and would not be potentially affected by flooding risks associated with tsunamis. Seiches do not pose a risk to the proposed project, as the project sites are not located adjacent to a large closed body of water. Based on the above, the proposed project would not pose a risk related to the release of pollutants due to project inundation due to flooding, tsunami, or seiche, and **no impact** would occur.

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<sup>17</sup> Federal Emergency Management Agency. *Flood Insurance Rate Map 0603950001C*. Effective March 23, 1984.

## 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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### 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 proposed project would include development of a total of 172 single family residences separated between the two project sites. Existing residential land uses exist in the project vicinity of the Orchard View I site. The land surrounding Orchard View II includes residences on all sides. Therefore, the proposed project would be a continuation of, and consistent with, the surrounding development and would not isolate an existing land use. As such, the proposed project would not physically divide an established community and a **less-than-significant** impact would occur.
- b. As noted throughout this IS/MND, the proposed project is consistent with the Live Oak 2030 General Plan land use and zoning designations for the project sites. Thus, buildout of the project has been anticipated and analyzed in the General Plan EIR. The proposed project would not involve any operations or uses that would result in new or more severe impacts from what has already been anticipated and analyzed in the General Plan EIR. In addition, as discussed throughout this IS/MND, mitigation measures have been incorporated sufficient to reduce any potential impacts to less-than-significant levels. Furthermore, the proposed project would be required to adhere to all applicable Live Oak 2030 General Plan goals and policies, as well as all applicable standards set forth in the City's Municipal Code. Thus, the project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>

### **Discussion**

- a,b. The Live Oak 2030 General Plan determined that known mineral resource zones do not exist within the City of Live Oak. In addition, the General Plan EIR affirms that mineral resources are not currently being mined or produced in the planning area. Therefore, the project sites do not contain mineral resources and the construction of the proposed project would not result in the loss of any known mineral resources. Furthermore, mineral extraction activity on the project sites would be incompatible with the existing residential land uses adjacent to the project sites, as well as the Live Oak 2030 General Plan land use and zoning designations for the sites. Therefore, ***no impact*** to mineral resources would occur.

### **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?	<input type="checkbox"/>	<input type="checkbox"/>	<b>×</b>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<b>×</b>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<b>×</b>	<input type="checkbox"/>

### **Discussion**

- a. The following section includes a discussion of the sensitive receptors in the project area, and the potential impacts related to construction, traffic, and non-transportation noise sources associated with the proposed project.

#### **Sensitive Noise Receptors**

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. The sensitive receptors nearest to Orchard View I would be the single-family residences located along Epperson Way and the residence along Luther Road, all located within 25 feet of the project site. Orchard View II is surrounded by residences on all sides, with the closest being located along the eastern site border, within 25 feet of the project site.

#### **Construction Noise**

Construction activities associated with development of the project sites would result in temporarily increased noise levels from grading, paving, and building construction activities. According to the Federal Highway Administration, activities involved in construction typically generate maximum noise levels ranging from 84 to 98 dBA  $L_{max}$  at a distance of 20 feet.<sup>18</sup> Construction noise during development would result from mechanical equipment such as earthmovers, dump trucks, and similar equipment during grading, the delivery of construction materials, construction of foundations, framing, roofing, and similar operations. Noise levels vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. However, construction activity would occur over a relatively short period of time, and would be anticipated to occur during normal daytime hours. Therefore, construction noise levels at the nearby residences would be minimized.

Chapter 9.30 of the City of Live Oak Municipal Code defines noise regulations which prohibit, "unnecessary, excessive, and annoying noises from all sources, subject to police power." Item E of Section 9.30.020, Offensive Noise Standards, of the Municipal Code prohibits any outside construction or repair work on buildings, structures or projects, or to

<sup>18</sup> Federal Highway Administration. *Roadway Construction Noise Model User's Guide*. January 2006.

operate any equipment such as a pile driver, pneumatic hammer, power shovel, or any other construction-type device between the hours of 10:00 PM and 7:00 AM. Construction of the proposed project would be required to comply with the Noise Control Ordinance's prohibited hours.

Provided that project construction activities do not occur during restricted hours, and that noise-generating equipment is equipped with sound-dampening or noise-reducing features where appropriate, construction noise associated with the project would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project.

### Traffic Noise

The Live Oak 2030 General Plan defines normally acceptable noise exposure from transportation sources at sensitive land uses as 45 dBA  $L_{dn}$  for interior spaces and 60 dBA  $L_{dn}$  for exterior spaces. As further discussed in Section XVII, Transportation, of this IS/MND, the proposed project would result in an increase of 1,637 daily vehicle trips on local roadways. Increased vehicle trips would result in increased noise levels associated with traffic along local roadways. However, given that the proposed project is consistent with the Live Oak 2030 General Plan land use designation for the site, impacts related to an increase in noise associated with buildout of the proposed project have been previously analyzed by the General Plan EIR. The proposed project would not involve any operations or uses that would result in new, or increase the severity of, impacts identified in the General Plan EIR.

### Non-Transportation Noise

Non-transportation noise sources include commercial and industrial processes, outdoor recreation activities, rail yard activities, and small mechanical devices such as lawnmowers, leaf blowers, and air conditioners.<sup>19</sup> The Live Oak 2030 General Plan establishes criteria for non-transportation noise thresholds, as well as separate thresholds intended to prevent the creation of incompatible land uses due to noise levels. The City's non-transportation related noise thresholds are presented in Table 9 below.

<b>Table 9</b>		
<b>Maximum Allowable Noise Exposure from Non-Transportation Noise Sources at Noise Sensitive Land Uses</b>		
<b>Noise Level Descriptor</b>	<b>Exterior Noise Level Standards, dBA</b>	
	<b>Daytime (7 AM to 10 PM)</b>	<b>Nighttime (10 PM to 7 AM)</b>
Hourly $L_{eq}$ , dB	60	45
$L_{max}$ , dB	75	65
Notes: dBA = A-weighted decibel; $L_{eq}$ = energy-equivalent noise level; $L_{max}$ = maximum noise level.		
<b>Source: Live Oak 2030 General Plan: Noise Element.</b>		

Residential land uses are not typically considered substantial sources of noise. Noise-generating operations associated with the proposed residences would primarily consist of landscaping maintenance and heating, ventilation, and air conditioning (HVAC) systems, and other typical residential activities. Such activities are not expected to generate noise

<sup>19</sup> Sacramento Area Council of Governments. *MTP/SCS 2016 Draft Environmental Impact Report Chapter 13: Noise and Vibration*. September 2019.



levels exceeding the City of Live Oak's exterior noise level standards for non-transportation noise sources. Therefore, operation of the proposed project would not be considered to generate a substantial permanent increase in ambient noise levels in the vicinity of the project.

### Conclusion

Based on the above, construction and operation of the proposed project would not result in the 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 Live Oak 2030 General Plan or the City's Municipal Code. Therefore, impacts would be considered **less-than-significant**.

- b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. According to Caltrans, the threshold for architectural damage to structures is 0.20 inches per second peak particle velocity (in/sec PPV) and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.<sup>20</sup>

The proposed project would not involve any long-term sources of vibration. The primary vibration-generating activities associated with the proposed project would occur during grading, placement of utilities, and construction of foundations. Table 10 shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with construction activities is the potential use of vibratory compactors/rollers, which may be required during construction, approximately 25 feet from existing residences.

<b>Table 10</b>		
<b>Vibration Levels for Various Construction Equipment</b>		
<b>Type of Equipment</b>	<b>Peak Particle Velocity @ 25 feet (in/sec)</b>	<b>Peak Particle Velocity @ 50 feet (in/sec)</b>
Large Bulldozer	0.089	0.029
Loaded Trucks	0.076	0.025
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.029
Jackhammer	0.035	0.011
Vibratory Hammer	0.070	0.023
Vibratory Compactor/roller	0.210	0.070
<b>Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.</b>		

Although vibration associated with construction of the project would add to the vibration environment in the immediate project vicinity, construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours, consistent with Section 9.30.020 of the Municipal Code. Because the proposed project would not

<sup>20</sup> California Department of Transportation (Caltrans). *Transportation Related Earthborne Vibrations*. TAV-02-01-R9601. February 20, 2002.

cause continuous, long-term vibrations, the project would not be expected to result in extended annoyance to the nearby sensitive receptors.

Groundborne vibration associated with construction activities would be temporary in nature and, pursuant to Section 9.30.020 of the Live Oak Municipal Code, would occur during normal daytime working hours. Nonetheless, the use of vibratory compactors or rollers during construction has the potential to exceed the applicable City standards and could expose people to or generate excessive groundborne vibration or groundborne noise levels. Thus, 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.

*XIII-1            During construction activities associated with the proposed project, any compaction required within 25 feet of existing structures adjacent to the project site shall be accomplished by using static drum rollers rather than vibratory compactors. The above requirement shall be included via notation on any grading plans approved for the project to the satisfaction of the City of Live Oak Planning Department.*

- c. The nearest airport to the project sites is Bowles Airport, which is a small, privately-owned airport located approximately one mile west of the sites. The Bowles Airport does not have an adopted land use plan. The closest public airport is the Sutter County Airport, located over 11 miles south of the project sites. Therefore, the project sites are not located within an airport land use plan or located within two miles of a public airport that would expose the future residents of the project to excessive noise levels. Therefore, a ***less-than-significant*** impact is expected to occur related to excessive air traffic noise.

#### 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)?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

#### Discussion

- a. The proposed project would include the development of a total of 172 single-family residential units. According to the Census Bureau's data from 2014 to 2018, an average of 3.48 persons occupy each household in the City of Live Oak.<sup>21</sup> As a result, the proposed project could add approximately 599 new residents to the City. As discussed throughout this IS/MND, the proposed project would be consistent with the Live Oak 2030 General Plan land use and zoning designations for each site. Both project sites have been planned for residential development. As such, the increase in population associated with the proposed project has been previously anticipated and analyzed in the General Plan EIR. Thus, implementation of the proposed project would not induce substantial unplanned population growth in the area, and a **less-than-significant** impact would occur.
- b. Residences do not currently exist on either project site. Therefore, the proposed project would not displace any people or housing, and **no impact** would occur.

<sup>21</sup> United States Census Bureau. *Quickfacts Live Oak City, California*. Available at: <https://www.census.gov/quickfacts/fact/table/liveoakcitycalifornia/HSD310218#HSD310218>. Accessed February 2020.

## **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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
e. Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

## **Discussion**

a,b. Live Oak is served by the Live Oak Fire Department (LOFD), which is run by the Sutter County Fire Services under a contract with the City. The fire station in Live Oak is located at 2745 Fir Street, which is approximately 0.7-mile southeast of the Orchard View I site and 0.25-mile east of the Orchard View II site. The LOFD recommends a maximum response time of four minutes. Given both project sites' proximity to the station on Fir Street, fire protection services could reasonably respond to incidents at the project sites within the four-minute timeframe.

The Sutter County Sheriff's Department would provide police protection services at the project sites. The Live Oak Substation is located at 2755 Fir Street, and the station is staffed by seven patrol deputies, one sergeant, and one lieutenant.<sup>22</sup> As stated in the Live Oak 2030 General Plan, the Sheriff's adopted staffing ratio goal is 1.1 officers per 1,000 residents. Based on the nine current officers, the Live Oak station falls short of the staffing ratio goal.

General Plan Policy PUBLIC-9.6 requires that new developments incorporate Crime Prevention through Environmental Design (CPTED) principles, implementation of which would reduce the potential for criminal activity within the proposed neighborhoods. Examples of CPTED principles include natural surveillance, natural access control, and territorial reinforcement, such as the provision of sufficient lighting, design of homes with windows overlooking streets and sidewalks, clear signage delineating public and private property, and fencing. The proposed project would be required to incorporate features consistent with the CPTED principles, such as the aforementioned examples, which would help to discourage criminal activity, thereby reducing the potential demand for police protection services.

The project applicant would be required to pay development impact fees and a public safety fee pursuant to Section 15.50.020 of the Live Oak Municipal Code. Payment of fees would ensure that adequate fire and police protection services would be available to serve the proposed project, and the proposed project would not require the construction of new or physically altered facilities.

<sup>22</sup> Sutter County Sheriff. *Live Oak Substation*. Available at: <https://www.suttersheriff.org/div/lo/liveoak.aspx>. Accessed February 2020.

Because the proposed project is consistent with the project sites' Live Oak 2030 General Plan and zoning designations, potential increases in demand for fire and police protection services associated with buildout of the sites have been previously anticipated by the City and analyzed in the General Plan EIR. Furthermore, the project would comply with all applicable State and local requirements related to fire safety and security, including installation of fire sprinklers. Compliance with such standards would minimize fire and police protection demands associated with the project. Therefore, the proposed project would have a **less-than-significant** impact related to the need for new or physically altered fire or police protection facilities, the construction of which could cause significant environmental impacts.

- c. The City of Live Oak falls within the Live Oak Unified School District (LOUSD), which consists of six schools: two elementary schools, one middle school, one high school, as well as one continuation high school and one alternative school (grades one through 12). As of the 2019 enrollment period, 1,862 students are currently enrolled in the LOUSD.<sup>23</sup> The proposed project includes the development of two single-family residential subdivisions with a total of 172 units. Using the student generation rates provided in the General Plan EIR, the proposed project's anticipated student generation is present in Table 10 below.

<b>Table 10</b>			
<b>Orchard View I and II Subdivision Project Student Generation</b>			
<b>Grade</b>	<b>Number of Units</b>	<b>Students/Unit</b>	<b>Number of Students</b>
K-6	172	0.636	109
7-8	172	0.091	16
9-12	172	0.136	23
<b>Total</b>	<b>172</b>	<b>0.863</b>	<b>148</b>
<b>Source: Live Oak 2030 General Plan EIR, September 2008.</b>			

According to the Live Oak 2030 General Plan, all the schools within the LOUSD are currently exceeding capacity. The expected increase of 148 students would make up an eight percent increase above the existing enrollment. However, funding for new school construction is provided through State and local revenue sources. The applicant must pay development impact fees to the LOUSD, which are established pursuant to Section 17620 et. seq. of the California Education Code. The City of Live Oak will collect such fees prior to the issuance of building permits for new homes and transfer the fees to the local school district. 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."

Thus, payment of mandatory impact fees would be sufficient to offset the project's impacts involving demands on school district facilities, and additional mitigation cannot be imposed, pursuant to California Government Code Section 65996. Therefore, compliance with existing State regulations would be considered sufficient to ensure the project's impacts involving demand on local school facilities would be **less than significant**.

<sup>23</sup> California School Dashboard. *District Performance Review: Live Oak Unified*. Available at: <https://www.caschooldashboard.org/reports/51713990000000/2019>. Accessed February 2020.



- d. The City of Live Oak Parks and Recreation Department manages five parks: Live Oak Memorial Park; Pennington Ranch Park; Oak Tree Park; Date Street Park; and Live Oak Riverfront Park. The closest park to the project sites is the Live Oak Memorial Park, located at Pennington Road and P Street. Using an average persons per household value of 3.48 per residential unit, the proposed project could generate a population of approximately 599 persons.<sup>24</sup> The Parks Acreage Standards<sup>25</sup> noted in the Live Oak 2030 General Plan requires one to two acres of neighborhood parkland per 1,000 residents; therefore, the project would be required to supply a minimum of 0.60 acres of parkland.<sup>26</sup> The proposed project would not include park areas. However, in compliance with Section 16.36.020 of Live Oak's Municipal Code, a proposed subdivision located on a site that does not include land designated by the Live Oak 2030 General Plan for park or recreation facilities may, at the City's discretion, pay a fee in-lieu of land dedication. The proposed project design does not include any lands designated for park or recreation facilities; thus, in accordance with the Section 16.36.020, the proposed project would be required to pay the in-lieu fee for parkland dedication. Payment of in-lieu fees would be considered sufficient to ensure that adequate public parkland is provided for future residents, and a ***less-than-significant*** impact would occur.
- e. The Live Oak 2030 General Plan anticipates increased demand for public facilities with growth in the City of Live Oak. The project sites are both designated for residential uses, which would increase demand for public facilities such as libraries or community centers. Because the proposed project would be consistent with the Live Oak 2030 General Plan land use and zoning designations for the sites, any increase in demand for other public facilities associated with buildout of the sites has been anticipated and analyzed as part of the General Plan EIR. Thus, implementation of the proposed project would not result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, outside of what has been previously anticipated. Therefore, a ***less-than-significant*** impact would occur.

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<sup>24</sup> United States Census Bureau. *Quickfacts Live Oak City, California*. Available at: <https://www.census.gov/quickfacts/fact/table/liveoakcitycalifornia/HSD310218#HSD310218>. Accessed February 2020.

<sup>25</sup> City of Live Oak. *Live Oak 2030 General Plan: Parks and Recreation Element* [page PARKS-6]. 2004.

<sup>26</sup> City of Live Oak. *Live Oak 2030 General Plan EIR. Land Use, Population, and Housing*. September 2008.

## 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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### Discussion

- a,b. The proposed project would involve the development of a total of 172 residences, which could, in turn, result in an increase in the use of existing neighborhood and regional parks or other recreational facilities. However, the project would be consistent with the Live Oak 2030 General Plan land use and zoning designations for the sites. As such, the increased demand on recreational facilities associated with buildout of the sites has been anticipated and previously analyzed in the General Plan EIR. Implementation of the proposed project would not increase the use of existing parks outside of the levels that were anticipated in the General Plan EIR.

As discussed in Section XV, Public Services, of this IS/MND, the Park Acreage Standards set forth in the Live Oak 2030 General Plan require one to two acres of neighborhood parkland per 1,000 residents; therefore, the project would be required to supply a minimum of 0.60 acres of parkland or pay in lieu fees for the dedication of parkland. The proposed project design does not include recreation facilities, and, therefore, would require the expansion of parkland to meet the Park Acreage Standards. In compliance with Section 16.36.020 of the Municipal Code, the proposed project would be required to pay in-lieu fees for the dedication of parkland. The payment of in-lieu fees would ensure that adequate parkland would be provided within the City.

Based on the above, the proposed project would result in a ***less-than-significant*** impact related to recreational facilities.

## **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?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>

### **Discussion**

- a. The proposed project would include the construction of 172 single-family residences, as well as internal roadways and extension of existing streets. The ITE Manual was used to estimate the potential number of vehicle trips that would result from development of the site.<sup>27</sup> Development and operation of the 172 single-family residential units would be anticipated to result in 129 vehicle trips in the AM peak hour, 172 vehicle trips in the PM peak hour, and 1,637 average daily trips.

Because the proposed project would be consistent with the land use designations for the sites, the increase in traffic associated with buildout of the sites was already anticipated and analyzed in the General Plan EIR. The traffic study referenced in the General Plan EIR identified the amount of vehicular traffic accompanying total buildout of the Live Oak 2030 General Plan, assigned traffic to the planned circulation system, and determined resulting LOS. Following buildout of the Live Oak 2030 General Plan, all City roadways would remain operating at acceptable LOS with the exception of one segment, Kola Street from N Street to SR 99, which is not located near the project site. Implementation of the Live Oak 2030 General Plan is anticipated to result in four segments along SR 99 operating at LOS F, none of which are in the vicinity of the project sites. While buildout of the planning area could result in significant impacts to some freeway segments, such impacts have been previously anticipated in the General Plan EIR, and implementation of the proposed project would not result in impacts more severe than those already anticipated.

The Yuba-Sutter Transit Pennington Road and O Street bus stop is located 0.2-mile east of the Orchard View II site and approximately 0.5-mile south of the Orchard View I site. In addition, the Yuba-Sutter Transit Richard Avenue and Presley Avenue bus stop is located approximately 750 feet west of the Orchard View II site. As such, public transportation is available in the vicinity of both project sites. Bicycle lanes exist along Pennington Road, Luther Road, and Erika Way. The residential roadways near each project site do not have marked bike lanes, but due to relatively slow vehicle speeds, the roadways are considered bikeable. Sidewalks exist along Pennington Road and Epperson Way. The proposed project would be required to comply with General Plan Policy CIRC-3.2, which requires new development to construct connected networks designed to promote multimodal travel, by providing sidewalks throughout the proposed development sites and connecting to existing off-site sidewalks. In addition, Table CIRC-1, Street Standards, of the Live Oak 2030 General Plan sets sidewalk and bike lane requirements for new streets. Per the

<sup>27</sup> Institute of Transportation Engineers. *Trip Generation 9<sup>th</sup> Edition*. November 16, 2012.

Street Standards, local streets, such as those proposed within the project sites, are required to have four- to six-foot-wide sidewalks. Marked bike lanes are not required along local streets. The proposed project would be required to comply with such standards, and therefore, operations of the proposed project are not anticipated to conflict with the local circulation systems.

Based on the above, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and a ***less-than-significant*** impact would occur.

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

Per Section 15064.3(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. While changes to driving conditions that increase intersection delay are an important consideration for traffic operations and management, the method of analysis does not fully describe environmental effects associated with fuel consumption, emissions, and public health. Section 15064.3(3) changes the focus of transportation impact analysis in CEQA from measuring impact to drivers to measuring the impact of driving.

Vehicle trips associated with construction would include transporting materials to the project sites along with employee commutes. Construction of the proposed facility would be relatively short-term, lasting approximately three years, compared to the lifetime of the proposed development. Due to the temporary nature of construction, the small temporary increase in VMT would not cause a substantial impact to transportation.

During operations, VMT would increase due to normal vehicle usage associated with the proposed residential land uses. The Pennington Road and O Street Yuba-Sutter Transit bus stop is located 1,000 ft east of the Orchard View II site, and approximately 0.5-mile from the Orchard View I site. The close proximity of public transit could help to decrease operational VMT.

The Live Oak 2030 General Plan includes standards for new streets, including the presence of pedestrian sidewalks and bike lanes. Under General Plan Policy CIRC-3.2, new developments shall construct connected networks designed to promote multimodal travel, which would help to minimize the use of single-passenger vehicles and decrease VMT. The project would include sidewalks on at least one side of all proposed roadways, and bicycle lanes currently exist along Pennington Road, Luther Road, Erika Way, and Epperson Way.

Because the proposed project is consistent with the Live Oak 2030 General Plan land use and zoning designations for the sites, buildout of the project sites has already been analyzed in the General Plan EIR and accounted for in regional planning efforts. The proposed project would not involve an increase in VMT in excess of what has already been anticipated to occur from buildout of the City.

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

- c. The proposed project would not include design features that would affect traffic safety, nor involve any incompatible uses. As noted in Section III, Air Quality, of this IS/MND, FRAQMD requires several standard mitigation measures, including a construction traffic management plan. The construction traffic management plan would minimize traffic flow interference from construction activities and would reduce potential traffic hazards during such activities. Significant adverse impacts related to roadway design features or incompatible uses would not result from implementation of the proposed project, and ***less-than-significant*** would occur.
- d. During project construction, public roads in the vicinity would remain open and available for use by emergency vehicles and other traffic. The proposed project would construct internal circulation roads consistent with Title 19 Section 3.05 of the California Code of Regulations, which mandates right-of-way lanes not be less than 20 feet in width and fire/emergency access lanes be a minimum of 20 feet wide. Based on the site plans, all internal roadways would have 30-foot wide lanes. Therefore, the proposed project would not result in inadequate emergency access to the project area, nor any road closures. The proposed project would include on-site roads of appropriate size to accommodate emergency vehicles, and a ***less-than-significant*** impact to emergency access would occur.



## XVIII. TRIBAL CULTURAL RESOURCES.

*Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:*

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	<input type="checkbox"/>	<b>×</b>	<input type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<b>×</b>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

- a,b. Tribal cultural resources are generally defined by Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. The NAHC was contacted and requested to perform a search of their Sacred Lands File for traditional cultural resources within or near the project area. The reply from the NAHC stated that the search failed to indicate the presence of Native American sacred lands or traditional cultural properties in the immediate vicinity. As discussed in Section V, Cultural Resources, of this IS/MND, the potential for unrecorded Native American resources to exist within the project sites is relatively low based on existing environmental conditions, and Native American resources have not been identified within the vicinity of either project site.

In addition, under Assembly Bill (AB) 52, formal consultation with California Native American Tribes must be conducted by lead agencies for proposed projects. In particular, lead agencies are required to consult with Native American tribes early in the CEQA process if a Native American tribe has first requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in their geographic area. Pursuant to AB 52, the City of Live Oak provided notification to the Torrez Martinez Desert Cahuilla Indians, Lone Band of Miwok Indians, and United Auburn Indian Community of the Auburn Ranchera. To date, the City has not received a response from the aforementioned tribes.

Nevertheless, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource if previously unknown cultural resources are uncovered during grading or other ground-disturbing activities. Thus, a **potentially significant** impact to tribal cultural resources could occur.

### **Mitigation Measure(s)**

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

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

## XIX. UTILITIES AND SERVICE SYSTEMS.

*Would the project:*

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

### Discussion

- a. Water and sewer services for the proposed developed would be provided by the City of Live Oak. As part of the proposed project, new sanitary sewer lines and water lines would be extended from existing City infrastructure to the project site. Stormwater runoff from the project sites would flow into gutters along the internal roadways and into the City's existing storm drainage system. Electricity, natural gas, and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. Therefore, the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, or other utility infrastructure would not be required.

Furthermore, given that the proposed project is consistent with the site's Live Oak 2030 General Plan land use and zoning designations, standard utility improvements associated with development of the site have been anticipated by the City, and associated environmental effects have been analyzed in the General Plan EIR. Therefore, the project would result in a **less-than-significant** impact related to the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

- b. The City of Live Oak relies entirely on groundwater from the East Butte Subbasin. Water is supplied from five wells owned and operated by the City of Live Oak. According to the General Plan EIR, new potable water demands are to be met through additional groundwater pumping as buildout of the Live Oak 2030 General Plan would trigger the need for new or expanded water supply entitlements. The proposed project would incur a

development impact fee in order to fund the future development of wells and the subsequent distribution systems

Per the Live Oak 2030 General Plan, although water demand is expected to increase substantially over time, the projected total water demand in the year 2030 would be roughly 0.4 percent of the East Butte Subbasin's total storage capacity. As such, the local groundwater basin has adequate capacity to meet water demand for the foreseeable future, and implementation of the Live Oak 2030 General Plan would not have a long-term substantial adverse effect on groundwater levels or supply in the region.

Given that the project is consistent with the Live Oak 2030 General Plan land use designations, water demand associated with buildout of the project sites has been anticipated by the City and accounted for in regional planning efforts. In addition, the project would comply with Chapter 17.27.090 of the City's Municipal Code, which contains the City's Irrigation Standards for water efficiency, and Chapter 13.040.136, which includes a list of prohibited activities to promote water conservation. Therefore, the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years, and a **less-than-significant** impact would occur.

- c. Within the City of Live Oak, sewer service is provided by the City's Department of Public Works. All of the wastewater flow is conveyed to the City's wastewater treatment plant (WWTP), which has a capacity of 1.4 million gallons per day (mgd). Based on projections in the City's Wastewater Master Plan, the WWTP is currently operating at 1.2 mgd.<sup>28</sup> Operation of the proposed project would increase the demand for wastewater treatment by generating wastewater through utilization of restroom facilities, landscaping, laundry and other typical residential uses. Per the Live Oak 2030 General Plan, new WWTP facilities will be needed to handle projected ultimate flows occurring under buildout of the City's Planning Area. Planned improvements to the WWTP would increase the treatment capacity to 2.8 mgd.

The proposed project is consistent with the site's current Live Oak 2030 General Plan land use and zoning designations. Thus, increased demand for wastewater collection and treatment facilities associated with buildout of the site have been anticipated and analyzed in the General Plan EIR and accounted for in regional planning efforts. In addition, the project would be subject to payment of the City's development impact fees, which would ensure that funds are available to provide for future improvements to the City's WWTP, as necessary. Thus, the City would have adequate capacity to serve the wastewater demand projected for the proposed project in addition to the City's existing commitments, and a **less-than-significant** impact would occur.

- d,e. Waste collection in the City of Live Oak is coordinated through a joint powers agreement with Yuba County. The Recology Ostrom Road Landfill in Yuba County is the primary destination for solid waste collected in Live Oak. The Landfill is permitted to accept 3,000 tons of solid waste per day and has an estimated remaining capacity of 39,223,000 cubic yards (90 percent). The expected closure date of the facility is December 2066.<sup>29</sup>

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<sup>28</sup> City of Live Oak. *Wastewater Collection System Master Plan* [8-1]. November 2009.

<sup>29</sup> Cal Recycle. *SWIS Facility Detail: Recology Ostrom Road LF Inc. (58-AA-0011)*. Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/58-AA-0011>. Accessed February 2020.

Because the proposed project is consistent with the project sites' Live Oak 2030 General Plan land use and zoning designations, construction and operation of the proposed project would not result in increased solid waste generation beyond what has been previously anticipated for the site by the City and analyzed in the General Plan EIR. In addition, the project would be required to comply with all applicable provisions of Chapter 8.05, Refuse Collection and Disposal, of the City's Municipal Code. Therefore, the proposed project would not 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 and would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Thus, a ***less-than-significant*** impact related to solid waste would occur as a result of the proposed 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?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✗</b>	<input type="checkbox"/>

## **Discussion**

- a-d. According to the CAL FIRE Fire and Resource Assessment Program, neither project site is located within or near a state responsibility area or lands classified as a Very High Fire Hazard Severity Zone (VHFHSZ).<sup>30</sup> Therefore, the proposed project would not be subject to substantial risks or hazards related to wildfires, and a ***less-than-significant*** impact would occur.

<sup>30</sup> California Department of Forestry and Fire Protection. *Sutter County, Draft Fire Hazard Severity Zones in LRA*. October 3, 2007.



## 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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

### Discussion

- a. As discussed in Section IV, Biological Resources, of this IS/MND, while the potential exists for nesting birds and raptors protected by the MBTA and special-status bats to occur on-site, Mitigation Measures IV-1 through IV-3 would ensure that impacts to special-status species would be less than significant. The project sites are regularly disturbed due to the current use of the sites as orchards, and do not contain any known historic or prehistoric resources. Thus, implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic or prehistoric resources. Nevertheless, Mitigation Measures V-1 and V-2 would ensure that in the event that historic or prehistoric resources are discovered within the project sites during construction activities, such resources are protected in compliance with the requirements of CEQA.

Considering the above, the proposed project would not: 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, a **less-than-significant** impact would occur.

- b. The proposed project in conjunction with other development within the City of Live Oak could incrementally contribute to cumulative impacts in the area. However, mitigation measures for all potentially significant project-level impacts identified for the proposed project in this IS/MND have been included that would reduce impacts to less-than-significant levels. In addition, the proposed project is consistent with the Live Oak 2030 General Plan land use and zoning designations for the sites, and, thus, buildout of the sites has been anticipated and included in the cumulative analysis conducted for the General Plan EIR. Any future development projects not previously anticipated by the General Plan EIR or other relevant environmental analysis conducted by the City of Live Oak would be required to undergo a separate environmental analysis and mitigate any project- or site-specific potential impacts, as necessary. Therefore, the proposed project

would not have any impacts that would be cumulatively considerable, and impacts would be ***less than significant***.

- c. As described in this IS/MND, the proposed project would comply with all applicable Live Oak 2030 General Plan policies, Municipal Code standards, and other applicable local and State regulations. In addition, as discussed in Section III, Air Quality, Section VIII, Greenhouse Gas Emissions, Section IX, Hazards and Hazardous Materials, Section XIII, Noise, and Section XVII, Transportation, of this IS/MND, with implementation of all mitigation measures included herein, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, GHG emissions, hazardous materials, noise, and traffic. Therefore, the proposed project would result in a ***less-than-significant*** impact.

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

## Orchard View I and II Subdivision

### Feather River AQMD Air District, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	172.00	Dwelling Unit	38.38	309,600.00	492

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	67
<b>Climate Zone</b>	3			<b>Operational Year</b>	2024
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	245.88	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Project Characteristics - CO2 intensity factor adjusted per PG&E's RPS projections.

Land Use - acreage updated per site plans

Construction Phase - total days of architectural coating were set to match total days of building construction to represent the two phases happening concurrently.

Grading - total acres graded set to total acreage of the project site

Mobile Land Use Mitigation -

Energy Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	740.00
tblConstructionPhase	PhaseEndDate	1/5/2024	8/25/2023
tblConstructionPhase	PhaseEndDate	8/4/2023	8/11/2023
tblConstructionPhase	PhaseEndDate	10/2/2020	7/24/2020
tblConstructionPhase	PhaseEndDate	10/20/2023	10/9/2020
tblConstructionPhase	PhaseEndDate	6/19/2020	4/10/2020
tblConstructionPhase	PhaseStartDate	10/21/2023	10/24/2020
tblConstructionPhase	PhaseStartDate	10/3/2020	10/10/2020
tblConstructionPhase	PhaseStartDate	6/20/2020	4/13/2020
tblConstructionPhase	PhaseStartDate	8/5/2023	7/25/2020
tblConstructionPhase	PhaseStartDate	5/9/2020	3/2/2020
tblGrading	AcresOfGrading	187.50	38.38
tblLandUse	LotAcreage	55.84	38.38
tblProjectCharacteristics	CO2IntensityFactor	641.35	245.88

## 2.0 Emissions Summary

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## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.6711	3.5906	2.5912	4.8100e-003	0.5487	0.1714	0.7201	0.2838	0.1586	0.4424	0.0000	422.5049	422.5049	0.1190	0.0000	425.4809
2021	2.0284	2.7667	2.7234	5.2700e-003	0.0916	0.1386	0.2302	0.0247	0.1310	0.1558	0.0000	462.2326	462.2326	0.0814	0.0000	464.2666
2022	1.9899	2.4876	2.6520	5.2200e-003	0.0912	0.1169	0.2081	0.0246	0.1106	0.1352	0.0000	457.7561	457.7561	0.0802	0.0000	459.7606
2023	1.2766	1.3986	1.6135	3.2100e-003	0.0566	0.0624	0.1190	0.0153	0.0591	0.0744	0.0000	281.2257	281.2257	0.0481	0.0000	282.4280
<b>Maximum</b>	<b>2.0284</b>	<b>3.5906</b>	<b>2.7234</b>	<b>5.2700e-003</b>	<b>0.5487</b>	<b>0.1714</b>	<b>0.7201</b>	<b>0.2838</b>	<b>0.1586</b>	<b>0.4424</b>	<b>0.0000</b>	<b>462.2326</b>	<b>462.2326</b>	<b>0.1190</b>	<b>0.0000</b>	<b>464.2666</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**2.1 Overall Construction****Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.6711	3.5906	2.5912	4.8100e-003	0.5487	0.1714	0.7201	0.2838	0.1586	0.4424	0.0000	422.5045	422.5045	0.1190	0.0000	425.4804
2021	2.0284	2.7667	2.7234	5.2700e-003	0.0916	0.1386	0.2302	0.0247	0.1310	0.1558	0.0000	462.2322	462.2322	0.0814	0.0000	464.2662
2022	1.9899	2.4875	2.6520	5.2200e-003	0.0912	0.1169	0.2081	0.0246	0.1106	0.1352	0.0000	457.7557	457.7557	0.0802	0.0000	459.7602
2023	1.2766	1.3986	1.6135	3.2100e-003	0.0566	0.0624	0.1190	0.0153	0.0591	0.0744	0.0000	281.2254	281.2254	0.0481	0.0000	282.4277
Maximum	2.0284	3.5906	2.7234	5.2700e-003	0.5487	0.1714	0.7201	0.2838	0.1586	0.4424	0.0000	462.2322	462.2322	0.1190	0.0000	464.2662

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2020	5-31-2020	1.6252	1.6252
2	6-1-2020	8-31-2020	1.2677	1.2677
3	9-1-2020	11-30-2020	0.8694	0.8694
4	12-1-2020	2-28-2021	1.2094	1.2094
5	3-1-2021	5-31-2021	1.2074	1.2074
6	6-1-2021	8-31-2021	1.2068	1.2068
7	9-1-2021	11-30-2021	1.1949	1.1949
8	12-1-2021	2-28-2022	1.1337	1.1337

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9	3-1-2022	5-31-2022	1.1318	1.1318
10	6-1-2022	8-31-2022	1.1313	1.1313
11	9-1-2022	11-30-2022	1.1200	1.1200
12	12-1-2022	2-28-2023	1.0677	1.0677
13	3-1-2023	5-31-2023	1.0690	1.0690
14	6-1-2023	8-31-2023	0.9096	0.9096
		Highest	1.6252	1.6252

## 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	12.5242	0.2255	14.5986	0.0242		1.8749	1.8749		1.8749	1.8749	177.6687	76.5978	254.2666	0.1660	0.0140	262.5801
Energy	0.0243	0.2072	0.0882	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	408.0337	408.0337	0.0244	8.5000e-003	411.1773
Mobile	0.4599	3.8234	5.1724	0.0232	1.7407	0.0164	1.7571	0.4679	0.0154	0.4833	0.0000	2,144.4288	2,144.4288	0.0900	0.0000	2,146.6796
Waste						0.0000	0.0000		0.0000	0.0000	35.9538	0.0000	35.9538	2.1248	0.0000	89.0739
Water						0.0000	0.0000		0.0000	0.0000	3.5553	9.5208	13.0761	0.3663	8.8500e-003	24.8719
<b>Total</b>	<b>13.0083</b>	<b>4.2560</b>	<b>19.8591</b>	<b>0.0487</b>	<b>1.7407</b>	<b>1.9081</b>	<b>3.6488</b>	<b>0.4679</b>	<b>1.9071</b>	<b>2.3749</b>	<b>217.1778</b>	<b>2,638.5810</b>	<b>2,855.7588</b>	<b>2.7715</b>	<b>0.0313</b>	<b>2,934.3829</b>

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**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.5242	0.2255	14.5986	0.0242		1.8749	1.8749		1.8749	1.8749	177.6687	76.5978	254.2666	0.1660	0.0140	262.5801
Energy	0.0228	0.1948	0.0829	1.2400e-003		0.0158	0.0158		0.0158	0.0158	0.0000	225.5698	225.5698	4.3200e-003	4.1400e-003	226.9102
Mobile	0.4565	3.7911	5.0938	0.0228	1.7059	0.0161	1.7220	0.4585	0.0151	0.4736	0.0000	2,107.8307	2,107.8307	0.0894	0.0000	2,110.0645
Waste						0.0000	0.0000		0.0000	0.0000	35.9538	0.0000	35.9538	2.1248	0.0000	89.0739
Water						0.0000	0.0000		0.0000	0.0000	3.5553	9.5208	13.0761	0.3663	8.8500e-003	24.8719
<b>Total</b>	<b>13.0035</b>	<b>4.2114</b>	<b>19.7753</b>	<b>0.0482</b>	<b>1.7059</b>	<b>1.9068</b>	<b>3.6127</b>	<b>0.4585</b>	<b>1.9058</b>	<b>2.3643</b>	<b>217.1778</b>	<b>2,419.5191</b>	<b>2,636.6969</b>	<b>2.7507</b>	<b>0.0270</b>	<b>2,713.5006</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.04</b>	<b>1.05</b>	<b>0.42</b>	<b>0.96</b>	<b>2.00</b>	<b>0.07</b>	<b>0.99</b>	<b>2.00</b>	<b>0.07</b>	<b>0.45</b>	<b>0.00</b>	<b>8.30</b>	<b>7.67</b>	<b>0.75</b>	<b>13.92</b>	<b>7.53</b>

**3.0 Construction Detail****Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/2/2020	4/10/2020	5	30	
2	Grading	Grading	4/13/2020	7/24/2020	5	75	
3	Paving	Paving	7/25/2020	10/9/2020	5	55	
4	Building Construction	Building Construction	10/10/2020	8/11/2023	5	740	
5	Architectural Coating	Architectural Coating	10/24/2020	8/25/2023	5	740	

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

**Acres of Grading (Grading Phase): 38.38**

**Acres of Paving: 0**

**Residential Indoor: 626,940; Residential Outdoor: 208,980; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	62.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT



## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.1 Mitigation Measures Construction****3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5515
<b>Total</b>	<b>0.0612</b>	<b>0.6363</b>	<b>0.3227</b>	<b>5.7000e-004</b>	<b>0.2710</b>	<b>0.0330</b>	<b>0.3040</b>	<b>0.1490</b>	<b>0.0303</b>	<b>0.1793</b>	<b>0.0000</b>	<b>50.1460</b>	<b>50.1460</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5515</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0900e-003	8.9000e-004	8.4500e-003	2.0000e-005	2.1300e-003	1.0000e-005	2.1400e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7957	1.7957	6.0000e-005	0.0000	1.7973
<b>Total</b>	<b>1.0900e-003</b>	<b>8.9000e-004</b>	<b>8.4500e-003</b>	<b>2.0000e-005</b>	<b>2.1300e-003</b>	<b>1.0000e-005</b>	<b>2.1400e-003</b>	<b>5.7000e-004</b>	<b>1.0000e-005</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.7957</b>	<b>1.7957</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.7973</b>

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**3.2 Site Preparation - 2020****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					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5514
<b>Total</b>	<b>0.0612</b>	<b>0.6363</b>	<b>0.3227</b>	<b>5.7000e-004</b>	<b>0.2710</b>	<b>0.0330</b>	<b>0.3040</b>	<b>0.1490</b>	<b>0.0303</b>	<b>0.1793</b>	<b>0.0000</b>	<b>50.1460</b>	<b>50.1460</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5514</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0900e-003	8.9000e-004	8.4500e-003	2.0000e-005	2.1300e-003	1.0000e-005	2.1400e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7957	1.7957	6.0000e-005	0.0000	1.7973
<b>Total</b>	<b>1.0900e-003</b>	<b>8.9000e-004</b>	<b>8.4500e-003</b>	<b>2.0000e-005</b>	<b>2.1300e-003</b>	<b>1.0000e-005</b>	<b>2.1400e-003</b>	<b>5.7000e-004</b>	<b>1.0000e-005</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.7957</b>	<b>1.7957</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.7973</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2462	0.0000	0.2462	0.1263	0.0000	0.1263	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1669	1.8824	1.1984	2.3300e-003		0.0815	0.0815		0.0750	0.0750	0.0000	204.3161	204.3161	0.0661	0.0000	205.9681
<b>Total</b>	<b>0.1669</b>	<b>1.8824</b>	<b>1.1984</b>	<b>2.3300e-003</b>	<b>0.2462</b>	<b>0.0815</b>	<b>0.3277</b>	<b>0.1263</b>	<b>0.0750</b>	<b>0.2013</b>	<b>0.0000</b>	<b>204.3161</b>	<b>204.3161</b>	<b>0.0661</b>	<b>0.0000</b>	<b>205.9681</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0200e-003	2.4800e-003	0.0235	6.0000e-005	5.9200e-003	4.0000e-005	5.9500e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.9881	4.9881	1.7000e-004	0.0000	4.9924
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4800e-003</b>	<b>0.0235</b>	<b>6.0000e-005</b>	<b>5.9200e-003</b>	<b>4.0000e-005</b>	<b>5.9500e-003</b>	<b>1.5700e-003</b>	<b>4.0000e-005</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>4.9881</b>	<b>4.9881</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>4.9924</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.3 Grading - 2020****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					0.2462	0.0000	0.2462	0.1263	0.0000	0.1263	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1669	1.8824	1.1984	2.3300e-003		0.0815	0.0815		0.0750	0.0750	0.0000	204.3159	204.3159	0.0661	0.0000	205.9679
<b>Total</b>	<b>0.1669</b>	<b>1.8824</b>	<b>1.1984</b>	<b>2.3300e-003</b>	<b>0.2462</b>	<b>0.0815</b>	<b>0.3277</b>	<b>0.1263</b>	<b>0.0750</b>	<b>0.2013</b>	<b>0.0000</b>	<b>204.3159</b>	<b>204.3159</b>	<b>0.0661</b>	<b>0.0000</b>	<b>205.9679</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0200e-003	2.4800e-003	0.0235	6.0000e-005	5.9200e-003	4.0000e-005	5.9500e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.9881	4.9881	1.7000e-004	0.0000	4.9924
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4800e-003</b>	<b>0.0235</b>	<b>6.0000e-005</b>	<b>5.9200e-003</b>	<b>4.0000e-005</b>	<b>5.9500e-003</b>	<b>1.5700e-003</b>	<b>4.0000e-005</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>4.9881</b>	<b>4.9881</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>4.9924</b>

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**3.4 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0373	0.3868	0.4029	6.3000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	55.0776	55.0776	0.0178	0.0000	55.5229
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0373</b>	<b>0.3868</b>	<b>0.4029</b>	<b>6.3000e-004</b>		<b>0.0207</b>	<b>0.0207</b>		<b>0.0191</b>	<b>0.0191</b>	<b>0.0000</b>	<b>55.0776</b>	<b>55.0776</b>	<b>0.0178</b>	<b>0.0000</b>	<b>55.5229</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.3600e-003	0.0129	3.0000e-005	3.2500e-003	2.0000e-005	3.2700e-003	8.7000e-004	2.0000e-005	8.9000e-004	0.0000	2.7435	2.7435	9.0000e-005	0.0000	2.7458
<b>Total</b>	<b>1.6600e-003</b>	<b>1.3600e-003</b>	<b>0.0129</b>	<b>3.0000e-005</b>	<b>3.2500e-003</b>	<b>2.0000e-005</b>	<b>3.2700e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>2.7435</b>	<b>2.7435</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.7458</b>



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**3.4 Paving - 2020****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	0.0373	0.3868	0.4029	6.3000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	55.0775	55.0775	0.0178	0.0000	55.5229
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0373</b>	<b>0.3868</b>	<b>0.4029</b>	<b>6.3000e-004</b>		<b>0.0207</b>	<b>0.0207</b>		<b>0.0191</b>	<b>0.0191</b>	<b>0.0000</b>	<b>55.0775</b>	<b>55.0775</b>	<b>0.0178</b>	<b>0.0000</b>	<b>55.5229</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.3600e-003	0.0129	3.0000e-005	3.2500e-003	2.0000e-005	3.2700e-003	8.7000e-004	2.0000e-005	8.9000e-004	0.0000	2.7435	2.7435	9.0000e-005	0.0000	2.7458
<b>Total</b>	<b>1.6600e-003</b>	<b>1.3600e-003</b>	<b>0.0129</b>	<b>3.0000e-005</b>	<b>3.2500e-003</b>	<b>2.0000e-005</b>	<b>3.2700e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>2.7435</b>	<b>2.7435</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.7458</b>

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**3.5 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0625	0.5660	0.4970	7.9000e-004		0.0330	0.0330		0.0310	0.0310	0.0000	68.3250	68.3250	0.0167	0.0000	68.7417
<b>Total</b>	<b>0.0625</b>	<b>0.5660</b>	<b>0.4970</b>	<b>7.9000e-004</b>		<b>0.0330</b>	<b>0.0330</b>		<b>0.0310</b>	<b>0.0310</b>	<b>0.0000</b>	<b>68.3250</b>	<b>68.3250</b>	<b>0.0167</b>	<b>0.0000</b>	<b>68.7417</b>

**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	2.2800e-003	0.0661	0.0140	1.6000e-004	3.4800e-003	3.8000e-004	3.8600e-003	1.0100e-003	3.6000e-004	1.3700e-003	0.0000	14.7379	14.7379	9.6000e-004	0.0000	14.7618
Worker	7.3600e-003	6.0500e-003	0.0572	1.3000e-004	0.0144	9.0000e-005	0.0145	3.8400e-003	9.0000e-005	3.9300e-003	0.0000	12.1643	12.1643	4.2000e-004	0.0000	12.1748
<b>Total</b>	<b>9.6400e-003</b>	<b>0.0722</b>	<b>0.0712</b>	<b>2.9000e-004</b>	<b>0.0179</b>	<b>4.7000e-004</b>	<b>0.0184</b>	<b>4.8500e-003</b>	<b>4.5000e-004</b>	<b>5.3000e-003</b>	<b>0.0000</b>	<b>26.9022</b>	<b>26.9022</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>26.9366</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.5 Building Construction - 2020****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	0.0625	0.5660	0.4970	7.9000e-004		0.0330	0.0330		0.0310	0.0310	0.0000	68.3249	68.3249	0.0167	0.0000	68.7416
<b>Total</b>	<b>0.0625</b>	<b>0.5660</b>	<b>0.4970</b>	<b>7.9000e-004</b>		<b>0.0330</b>	<b>0.0330</b>		<b>0.0310</b>	<b>0.0310</b>	<b>0.0000</b>	<b>68.3249</b>	<b>68.3249</b>	<b>0.0167</b>	<b>0.0000</b>	<b>68.7416</b>

**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	2.2800e-003	0.0661	0.0140	1.6000e-004	3.4800e-003	3.8000e-004	3.8600e-003	1.0100e-003	3.6000e-004	1.3700e-003	0.0000	14.7379	14.7379	9.6000e-004	0.0000	14.7618
Worker	7.3600e-003	6.0500e-003	0.0572	1.3000e-004	0.0144	9.0000e-005	0.0145	3.8400e-003	9.0000e-005	3.9300e-003	0.0000	12.1643	12.1643	4.2000e-004	0.0000	12.1748
<b>Total</b>	<b>9.6400e-003</b>	<b>0.0722</b>	<b>0.0712</b>	<b>2.9000e-004</b>	<b>0.0179</b>	<b>4.7000e-004</b>	<b>0.0184</b>	<b>4.8500e-003</b>	<b>4.5000e-004</b>	<b>5.3000e-003</b>	<b>0.0000</b>	<b>26.9022</b>	<b>26.9022</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>26.9366</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.5 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
<b>Total</b>	<b>0.2481</b>	<b>2.2749</b>	<b>2.1631</b>	<b>3.5100e-003</b>		<b>0.1251</b>	<b>0.1251</b>		<b>0.1176</b>	<b>0.1176</b>	<b>0.0000</b>	<b>302.2867</b>	<b>302.2867</b>	<b>0.0729</b>	<b>0.0000</b>	<b>304.1099</b>

**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	8.0500e-003	0.2645	0.0523	6.8000e-004	0.0154	7.3000e-004	0.0161	4.4500e-003	7.0000e-004	5.1600e-003	0.0000	64.6670	64.6670	4.2100e-003	0.0000	64.7722
Worker	0.0298	0.0235	0.2270	5.7000e-004	0.0638	4.0000e-004	0.0642	0.0170	3.7000e-004	0.0174	0.0000	51.9116	51.9116	1.6200e-003	0.0000	51.9522
<b>Total</b>	<b>0.0378</b>	<b>0.2880</b>	<b>0.2792</b>	<b>1.2500e-003</b>	<b>0.0792</b>	<b>1.1300e-003</b>	<b>0.0804</b>	<b>0.0214</b>	<b>1.0700e-003</b>	<b>0.0225</b>	<b>0.0000</b>	<b>116.5786</b>	<b>116.5786</b>	<b>5.8300e-003</b>	<b>0.0000</b>	<b>116.7244</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.5 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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
<b>Total</b>	<b>0.2481</b>	<b>2.2749</b>	<b>2.1631</b>	<b>3.5100e-003</b>		<b>0.1251</b>	<b>0.1251</b>		<b>0.1176</b>	<b>0.1176</b>	<b>0.0000</b>	<b>302.2863</b>	<b>302.2863</b>	<b>0.0729</b>	<b>0.0000</b>	<b>304.1095</b>

**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	8.0500e-003	0.2645	0.0523	6.8000e-004	0.0154	7.3000e-004	0.0161	4.4500e-003	7.0000e-004	5.1600e-003	0.0000	64.6670	64.6670	4.2100e-003	0.0000	64.7722
Worker	0.0298	0.0235	0.2270	5.7000e-004	0.0638	4.0000e-004	0.0642	0.0170	3.7000e-004	0.0174	0.0000	51.9116	51.9116	1.6200e-003	0.0000	51.9522
<b>Total</b>	<b>0.0378</b>	<b>0.2880</b>	<b>0.2792</b>	<b>1.2500e-003</b>	<b>0.0792</b>	<b>1.1300e-003</b>	<b>0.0804</b>	<b>0.0214</b>	<b>1.0700e-003</b>	<b>0.0225</b>	<b>0.0000</b>	<b>116.5786</b>	<b>116.5786</b>	<b>5.8300e-003</b>	<b>0.0000</b>	<b>116.7244</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.5 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
<b>Total</b>	<b>0.2218</b>	<b>2.0300</b>	<b>2.1272</b>	<b>3.5000e-003</b>		<b>0.1052</b>	<b>0.1052</b>		<b>0.0990</b>	<b>0.0990</b>	<b>0.0000</b>	<b>301.2428</b>	<b>301.2428</b>	<b>0.0722</b>	<b>0.0000</b>	<b>303.0471</b>

**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	7.3800e-003	0.2497	0.0469	6.7000e-004	0.0153	6.3000e-004	0.0160	4.4400e-003	6.0000e-004	5.0400e-003	0.0000	63.8756	63.8756	4.1700e-003	0.0000	63.9798
Worker	0.0272	0.0207	0.2029	5.5000e-004	0.0636	3.9000e-004	0.0640	0.0169	3.6000e-004	0.0173	0.0000	49.8056	49.8056	1.4100e-003	0.0000	49.8409
<b>Total</b>	<b>0.0346</b>	<b>0.2704</b>	<b>0.2497</b>	<b>1.2200e-003</b>	<b>0.0789</b>	<b>1.0200e-003</b>	<b>0.0799</b>	<b>0.0214</b>	<b>9.6000e-004</b>	<b>0.0223</b>	<b>0.0000</b>	<b>113.6812</b>	<b>113.6812</b>	<b>5.5800e-003</b>	<b>0.0000</b>	<b>113.8206</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.5 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	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
<b>Total</b>	<b>0.2218</b>	<b>2.0300</b>	<b>2.1272</b>	<b>3.5000e-003</b>		<b>0.1052</b>	<b>0.1052</b>		<b>0.0990</b>	<b>0.0990</b>	<b>0.0000</b>	<b>301.2425</b>	<b>301.2425</b>	<b>0.0722</b>	<b>0.0000</b>	<b>303.0467</b>

**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	7.3800e-003	0.2497	0.0469	6.7000e-004	0.0153	6.3000e-004	0.0160	4.4400e-003	6.0000e-004	5.0400e-003	0.0000	63.8756	63.8756	4.1700e-003	0.0000	63.9798
Worker	0.0272	0.0207	0.2029	5.5000e-004	0.0636	3.9000e-004	0.0640	0.0169	3.6000e-004	0.0173	0.0000	49.8056	49.8056	1.4100e-003	0.0000	49.8409
<b>Total</b>	<b>0.0346</b>	<b>0.2704</b>	<b>0.2497</b>	<b>1.2200e-003</b>	<b>0.0789</b>	<b>1.0200e-003</b>	<b>0.0799</b>	<b>0.0214</b>	<b>9.6000e-004</b>	<b>0.0223</b>	<b>0.0000</b>	<b>113.6812</b>	<b>113.6812</b>	<b>5.5800e-003</b>	<b>0.0000</b>	<b>113.8206</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.5 Building Construction - 2023****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	0.1258	1.1508	1.2995	2.1600e-003		0.0560	0.0560		0.0527	0.0527	0.0000	185.4438	185.4438	0.0441	0.0000	186.5467
<b>Total</b>	<b>0.1258</b>	<b>1.1508</b>	<b>1.2995</b>	<b>2.1600e-003</b>		<b>0.0560</b>	<b>0.0560</b>		<b>0.0527</b>	<b>0.0527</b>	<b>0.0000</b>	<b>185.4438</b>	<b>185.4438</b>	<b>0.0441</b>	<b>0.0000</b>	<b>186.5467</b>

**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	3.2400e-003	0.1234	0.0237	4.1000e-004	9.4400e-003	1.3000e-004	9.5700e-003	2.7300e-003	1.3000e-004	2.8600e-003	0.0000	38.5420	38.5420	1.7600e-003	0.0000	38.5859
Worker	0.0155	0.0113	0.1131	3.3000e-004	0.0391	2.3000e-004	0.0394	0.0104	2.1000e-004	0.0106	0.0000	29.4757	29.4757	7.6000e-004	0.0000	29.4948
<b>Total</b>	<b>0.0187</b>	<b>0.1347</b>	<b>0.1368</b>	<b>7.4000e-004</b>	<b>0.0486</b>	<b>3.6000e-004</b>	<b>0.0489</b>	<b>0.0131</b>	<b>3.4000e-004</b>	<b>0.0135</b>	<b>0.0000</b>	<b>68.0177</b>	<b>68.0177</b>	<b>2.5200e-003</b>	<b>0.0000</b>	<b>68.0808</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.5 Building Construction - 2023****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	0.1258	1.1508	1.2995	2.1600e-003		0.0560	0.0560		0.0527	0.0527	0.0000	185.4436	185.4436	0.0441	0.0000	186.5464
<b>Total</b>	<b>0.1258</b>	<b>1.1508</b>	<b>1.2995</b>	<b>2.1600e-003</b>		<b>0.0560</b>	<b>0.0560</b>		<b>0.0527</b>	<b>0.0527</b>	<b>0.0000</b>	<b>185.4436</b>	<b>185.4436</b>	<b>0.0441</b>	<b>0.0000</b>	<b>186.5464</b>

**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	3.2400e-003	0.1234	0.0237	4.1000e-004	9.4400e-003	1.3000e-004	9.5700e-003	2.7300e-003	1.3000e-004	2.8600e-003	0.0000	38.5420	38.5420	1.7600e-003	0.0000	38.5859
Worker	0.0155	0.0113	0.1131	3.3000e-004	0.0391	2.3000e-004	0.0394	0.0104	2.1000e-004	0.0106	0.0000	29.4757	29.4757	7.6000e-004	0.0000	29.4948
<b>Total</b>	<b>0.0187</b>	<b>0.1347</b>	<b>0.1368</b>	<b>7.4000e-004</b>	<b>0.0486</b>	<b>3.6000e-004</b>	<b>0.0489</b>	<b>0.0131</b>	<b>3.4000e-004</b>	<b>0.0135</b>	<b>0.0000</b>	<b>68.0177</b>	<b>68.0177</b>	<b>2.5200e-003</b>	<b>0.0000</b>	<b>68.0808</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3207					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9300e-003	0.0413	0.0449	7.0000e-005		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	6.2555	6.2555	4.8000e-004	0.0000	6.2676
<b>Total</b>	<b>0.3266</b>	<b>0.0413</b>	<b>0.0449</b>	<b>7.0000e-005</b>		<b>2.7200e-003</b>	<b>2.7200e-003</b>		<b>2.7200e-003</b>	<b>2.7200e-003</b>	<b>0.0000</b>	<b>6.2555</b>	<b>6.2555</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>6.2676</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	9.7000e-004	9.2000e-003	2.0000e-005	2.3200e-003	2.0000e-005	2.3300e-003	6.2000e-004	1.0000e-005	6.3000e-004	0.0000	1.9553	1.9553	7.0000e-005	0.0000	1.9570
<b>Total</b>	<b>1.1800e-003</b>	<b>9.7000e-004</b>	<b>9.2000e-003</b>	<b>2.0000e-005</b>	<b>2.3200e-003</b>	<b>2.0000e-005</b>	<b>2.3300e-003</b>	<b>6.2000e-004</b>	<b>1.0000e-005</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>1.9553</b>	<b>1.9553</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.9570</b>



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**3.6 Architectural Coating - 2020****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	0.3207					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9300e-003	0.0413	0.0449	7.0000e-005		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	6.2555	6.2555	4.8000e-004	0.0000	6.2676
<b>Total</b>	<b>0.3266</b>	<b>0.0413</b>	<b>0.0449</b>	<b>7.0000e-005</b>		<b>2.7200e-003</b>	<b>2.7200e-003</b>		<b>2.7200e-003</b>	<b>2.7200e-003</b>	<b>0.0000</b>	<b>6.2555</b>	<b>6.2555</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>6.2676</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	9.7000e-004	9.2000e-003	2.0000e-005	2.3200e-003	2.0000e-005	2.3300e-003	6.2000e-004	1.0000e-005	6.3000e-004	0.0000	1.9553	1.9553	7.0000e-005	0.0000	1.9570
<b>Total</b>	<b>1.1800e-003</b>	<b>9.7000e-004</b>	<b>9.2000e-003</b>	<b>2.0000e-005</b>	<b>2.3200e-003</b>	<b>2.0000e-005</b>	<b>2.3300e-003</b>	<b>6.2000e-004</b>	<b>1.0000e-005</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>1.9553</b>	<b>1.9553</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.9570</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3200	33.3200	2.2900e-003	0.0000	33.3771
<b>Total</b>	<b>1.7368</b>	<b>0.1993</b>	<b>0.2372</b>	<b>3.9000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>	<b>0.0000</b>	<b>33.3200</b>	<b>33.3200</b>	<b>2.2900e-003</b>	<b>0.0000</b>	<b>33.3771</b>

**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	5.7600e-003	4.5600e-003	0.0439	1.1000e-004	0.0124	8.0000e-005	0.0124	3.2900e-003	7.0000e-005	3.3600e-003	0.0000	10.0474	10.0474	3.1000e-004	0.0000	10.0553
<b>Total</b>	<b>5.7600e-003</b>	<b>4.5600e-003</b>	<b>0.0439</b>	<b>1.1000e-004</b>	<b>0.0124</b>	<b>8.0000e-005</b>	<b>0.0124</b>	<b>3.2900e-003</b>	<b>7.0000e-005</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>10.0474</b>	<b>10.0474</b>	<b>3.1000e-004</b>	<b>0.0000</b>	<b>10.0553</b>

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**3.6 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	1.7082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3199	33.3199	2.2900e-003	0.0000	33.3771
<b>Total</b>	<b>1.7368</b>	<b>0.1993</b>	<b>0.2372</b>	<b>3.9000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>	<b>0.0000</b>	<b>33.3199</b>	<b>33.3199</b>	<b>2.2900e-003</b>	<b>0.0000</b>	<b>33.3771</b>

**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	5.7600e-003	4.5600e-003	0.0439	1.1000e-004	0.0124	8.0000e-005	0.0124	3.2900e-003	7.0000e-005	3.3600e-003	0.0000	10.0474	10.0474	3.1000e-004	0.0000	10.0553
<b>Total</b>	<b>5.7600e-003</b>	<b>4.5600e-003</b>	<b>0.0439</b>	<b>1.1000e-004</b>	<b>0.0124</b>	<b>8.0000e-005</b>	<b>0.0124</b>	<b>3.2900e-003</b>	<b>7.0000e-005</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>10.0474</b>	<b>10.0474</b>	<b>3.1000e-004</b>	<b>0.0000</b>	<b>10.0553</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.6 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	1.7016					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2463
<b>Total</b>	<b>1.7282</b>	<b>0.1831</b>	<b>0.2358</b>	<b>3.9000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>0.0106</b>	<b>0.0106</b>	<b>0.0000</b>	<b>33.1923</b>	<b>33.1923</b>	<b>2.1600e-003</b>	<b>0.0000</b>	<b>33.2463</b>

**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	5.2600e-003	4.0000e-003	0.0393	1.1000e-004	0.0123	8.0000e-005	0.0124	3.2700e-003	7.0000e-005	3.3400e-003	0.0000	9.6398	9.6398	2.7000e-004	0.0000	9.6466
<b>Total</b>	<b>5.2600e-003</b>	<b>4.0000e-003</b>	<b>0.0393</b>	<b>1.1000e-004</b>	<b>0.0123</b>	<b>8.0000e-005</b>	<b>0.0124</b>	<b>3.2700e-003</b>	<b>7.0000e-005</b>	<b>3.3400e-003</b>	<b>0.0000</b>	<b>9.6398</b>	<b>9.6398</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>9.6466</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**3.6 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	1.7016					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2463
<b>Total</b>	<b>1.7282</b>	<b>0.1831</b>	<b>0.2358</b>	<b>3.9000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>0.0106</b>	<b>0.0106</b>	<b>0.0000</b>	<b>33.1923</b>	<b>33.1923</b>	<b>2.1600e-003</b>	<b>0.0000</b>	<b>33.2463</b>

**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	5.2600e-003	4.0000e-003	0.0393	1.1000e-004	0.0123	8.0000e-005	0.0124	3.2700e-003	7.0000e-005	3.3400e-003	0.0000	9.6398	9.6398	2.7000e-004	0.0000	9.6466
<b>Total</b>	<b>5.2600e-003</b>	<b>4.0000e-003</b>	<b>0.0393</b>	<b>1.1000e-004</b>	<b>0.0123</b>	<b>8.0000e-005</b>	<b>0.0124</b>	<b>3.2700e-003</b>	<b>7.0000e-005</b>	<b>3.3400e-003</b>	<b>0.0000</b>	<b>9.6398</b>	<b>9.6398</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>9.6466</b>

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**3.6 Architectural Coating - 2023****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	1.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1108	0.1539	2.5000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	21.7027	21.7027	1.3000e-003	0.0000	21.7351
<b>Total</b>	<b>1.1289</b>	<b>0.1108</b>	<b>0.1539</b>	<b>2.5000e-004</b>		<b>6.0200e-003</b>	<b>6.0200e-003</b>		<b>6.0200e-003</b>	<b>6.0200e-003</b>	<b>0.0000</b>	<b>21.7027</b>	<b>21.7027</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>21.7351</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1800e-003	2.3200e-003	0.0233	7.0000e-005	8.0400e-003	5.0000e-005	8.0900e-003	2.1400e-003	4.0000e-005	2.1800e-003	0.0000	6.0615	6.0615	1.6000e-004	0.0000	6.0655
<b>Total</b>	<b>3.1800e-003</b>	<b>2.3200e-003</b>	<b>0.0233</b>	<b>7.0000e-005</b>	<b>8.0400e-003</b>	<b>5.0000e-005</b>	<b>8.0900e-003</b>	<b>2.1400e-003</b>	<b>4.0000e-005</b>	<b>2.1800e-003</b>	<b>0.0000</b>	<b>6.0615</b>	<b>6.0615</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>6.0655</b>



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**3.6 Architectural Coating - 2023****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	1.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1108	0.1539	2.5000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	21.7026	21.7026	1.3000e-003	0.0000	21.7351
<b>Total</b>	<b>1.1289</b>	<b>0.1108</b>	<b>0.1539</b>	<b>2.5000e-004</b>		<b>6.0200e-003</b>	<b>6.0200e-003</b>		<b>6.0200e-003</b>	<b>6.0200e-003</b>	<b>0.0000</b>	<b>21.7026</b>	<b>21.7026</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>21.7351</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1800e-003	2.3200e-003	0.0233	7.0000e-005	8.0400e-003	5.0000e-005	8.0900e-003	2.1400e-003	4.0000e-005	2.1800e-003	0.0000	6.0615	6.0615	1.6000e-004	0.0000	6.0655
<b>Total</b>	<b>3.1800e-003</b>	<b>2.3200e-003</b>	<b>0.0233</b>	<b>7.0000e-005</b>	<b>8.0400e-003</b>	<b>5.0000e-005</b>	<b>8.0900e-003</b>	<b>2.1400e-003</b>	<b>4.0000e-005</b>	<b>2.1800e-003</b>	<b>0.0000</b>	<b>6.0615</b>	<b>6.0615</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>6.0655</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

## Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4565	3.7911	5.0938	0.0228	1.7059	0.0161	1.7220	0.4585	0.0151	0.4736	0.0000	2,107.8307	2,107.8307	0.0894	0.0000	2,110.0645
Unmitigated	0.4599	3.8234	5.1724	0.0232	1.7407	0.0164	1.7571	0.4679	0.0154	0.4833	0.0000	2,144.4288	2,144.4288	0.0900	0.0000	2,146.6796

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,637.44	1,704.52	1482.64	4,654,620	4,561,527
Total	1,637.44	1,704.52	1,482.64	4,654,620	4,561,527

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

**4.4 Fleet Mix**

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.573673	0.026974	0.167669	0.101176	0.022318	0.005013	0.020723	0.074482	0.001168	0.000968	0.004119	0.001026	0.000692

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive 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	168.0576	168.0576	0.0198	4.1000e-003	169.7752
NaturalGas Mitigated	0.0228	0.1948	0.0829	1.2400e-003		0.0158	0.0158		0.0158	0.0158	0.0000	225.5698	225.5698	4.3200e-003	4.1400e-003	226.9102
NaturalGas Unmitigated	0.0243	0.2072	0.0882	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	239.9761	239.9761	4.6000e-003	4.4000e-003	241.4021

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**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	4.49698e+006	0.0243	0.2072	0.0882	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	239.9761	239.9761	4.6000e-003	4.4000e-003	241.4021
<b>Total</b>		<b>0.0243</b>	<b>0.2072</b>	<b>0.0882</b>	<b>1.3200e-003</b>		<b>0.0168</b>	<b>0.0168</b>		<b>0.0168</b>	<b>0.0168</b>	<b>0.0000</b>	<b>239.9761</b>	<b>239.9761</b>	<b>4.6000e-003</b>	<b>4.4000e-003</b>	<b>241.4021</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	4.22702e+006	0.0228	0.1948	0.0829	1.2400e-003		0.0158	0.0158		0.0158	0.0158	0.0000	225.5698	225.5698	4.3200e-003	4.1400e-003	226.9102
<b>Total</b>		<b>0.0228</b>	<b>0.1948</b>	<b>0.0829</b>	<b>1.2400e-003</b>		<b>0.0158</b>	<b>0.0158</b>		<b>0.0158</b>	<b>0.0158</b>	<b>0.0000</b>	<b>225.5698</b>	<b>225.5698</b>	<b>4.3200e-003</b>	<b>4.1400e-003</b>	<b>226.9102</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.50685e+006	168.0576	0.0198	4.1000e-003	169.7752
<b>Total</b>		<b>168.0576</b>	<b>0.0198</b>	<b>4.1000e-003</b>	<b>169.7752</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	12.5242	0.2255	14.5986	0.0242		1.8749	1.8749		1.8749	1.8749	177.6687	76.5978	254.2666	0.1660	0.0140	262.5801
Unmitigated	12.5242	0.2255	14.5986	0.0242		1.8749	1.8749		1.8749	1.8749	177.6687	76.5978	254.2666	0.1660	0.0140	262.5801

## 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	0.4843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2091					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	10.7924	0.2108	13.3220	0.0241		1.8679	1.8679		1.8679	1.8679	177.6687	74.5117	252.1804	0.1640	0.0140	260.4439
Landscaping	0.0384	0.0147	1.2766	7.0000e-005		7.0800e-003	7.0800e-003		7.0800e-003	7.0800e-003	0.0000	2.0862	2.0862	2.0000e-003	0.0000	2.1362
<b>Total</b>	<b>12.5242</b>	<b>0.2255</b>	<b>14.5986</b>	<b>0.0242</b>		<b>1.8750</b>	<b>1.8750</b>		<b>1.8750</b>	<b>1.8750</b>	<b>177.6687</b>	<b>76.5978</b>	<b>254.2666</b>	<b>0.1660</b>	<b>0.0140</b>	<b>262.5801</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**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	0.4843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2091					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	10.7924	0.2108	13.3220	0.0241		1.8679	1.8679		1.8679	1.8679	177.6687	74.5117	252.1804	0.1640	0.0140	260.4439
Landscaping	0.0384	0.0147	1.2766	7.0000e-005		7.0800e-003	7.0800e-003		7.0800e-003	7.0800e-003	0.0000	2.0862	2.0862	2.0000e-003	0.0000	2.1362
<b>Total</b>	<b>12.5242</b>	<b>0.2255</b>	<b>14.5986</b>	<b>0.0242</b>		<b>1.8750</b>	<b>1.8750</b>		<b>1.8750</b>	<b>1.8750</b>	<b>177.6687</b>	<b>76.5978</b>	<b>254.2666</b>	<b>0.1660</b>	<b>0.0140</b>	<b>262.5801</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**



## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.0761	0.3663	8.8500e-003	24.8719
Unmitigated	13.0761	0.3663	8.8500e-003	24.8719

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	11.2065 / 7.06496	13.0761	0.3663	8.8500e-003	24.8719
<b>Total</b>		<b>13.0761</b>	<b>0.3663</b>	<b>8.8500e-003</b>	<b>24.8719</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	11.2065 / 7.06496	13.0761	0.3663	8.8500e-003	24.8719
<b>Total</b>		<b>13.0761</b>	<b>0.3663</b>	<b>8.8500e-003</b>	<b>24.8719</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	35.9538	2.1248	0.0000	89.0739
Unmitigated	35.9538	2.1248	0.0000	89.0739

## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	177.12	35.9538	2.1248	0.0000	89.0739
<b>Total</b>		<b>35.9538</b>	<b>2.1248</b>	<b>0.0000</b>	<b>89.0739</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	177.12	35.9538	2.1248	0.0000	89.0739
<b>Total</b>		<b>35.9538</b>	<b>2.1248</b>	<b>0.0000</b>	<b>89.0739</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Orchard View I and II Subdivision - Feather River AQMD Air District, Annual

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

## Orchard View I and II Subdivision

### Feather River AQMD Air District, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	172.00	Dwelling Unit	38.38	309,600.00	492

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	67
<b>Climate Zone</b>	3			<b>Operational Year</b>	2024
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	245.88	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Project Characteristics - CO2 intensity factor adjusted per PG&E's RPS projections.

Land Use - acreage updated per site plans

Construction Phase - total days of architectural coating were set to match total days of building construction to represent the two phases happening concurrently.

Grading - total acres graded set to total acreage of the project site

Mobile Land Use Mitigation -

Energy Mitigation -

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	740.00
tblConstructionPhase	PhaseEndDate	1/5/2024	8/25/2023
tblConstructionPhase	PhaseEndDate	8/4/2023	8/11/2023
tblConstructionPhase	PhaseEndDate	10/2/2020	7/24/2020
tblConstructionPhase	PhaseEndDate	10/20/2023	10/9/2020
tblConstructionPhase	PhaseEndDate	6/19/2020	4/10/2020
tblConstructionPhase	PhaseStartDate	10/21/2023	10/24/2020
tblConstructionPhase	PhaseStartDate	10/3/2020	10/10/2020
tblConstructionPhase	PhaseStartDate	6/20/2020	4/13/2020
tblConstructionPhase	PhaseStartDate	8/5/2023	7/25/2020
tblConstructionPhase	PhaseStartDate	5/9/2020	3/2/2020
tblGrading	AcresOfGrading	187.50	38.38
tblLandUse	LotAcreage	55.84	38.38
tblProjectCharacteristics	CO2IntensityFactor	641.35	245.88

## 2.0 Emissions Summary

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## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	15.8712	50.2569	32.6876	0.0636	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,168.274 1	6,168.274 1	1.9481	0.0000	6,216.975 9
2021	15.5834	21.1466	21.1867	0.0410	0.7298	1.0619	1.7918	0.1964	1.0041	1.2004	0.0000	3,968.6511	3,968.651 1	0.6873	0.0000	3,985.832 6
2022	15.3432	19.0877	20.6922	0.0408	0.7298	0.8991	1.6289	0.1964	0.8507	1.0471	0.0000	3,943.622 5	3,943.622 5	0.6797	0.0000	3,960.613 6
2023	15.1584	17.3647	20.3150	0.0405	0.7298	0.7757	1.5055	0.1964	0.7340	0.9304	0.0000	3,912.376 4	3,912.376 4	0.6616	0.0000	3,928.917 2
Maximum	15.8712	50.2569	32.6876	0.0636	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,168.274 1	6,168.274 1	1.9481	0.0000	6,216.975 9



## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	15.8712	50.2569	32.6876	0.0636	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,168.2741	6,168.2741	1.9481	0.0000	6,216.9759
2021	15.5834	21.1466	21.1867	0.0410	0.7298	1.0619	1.7918	0.1964	1.0041	1.2004	0.0000	3,968.6511	3,968.6511	0.6873	0.0000	3,985.8326
2022	15.3432	19.0877	20.6922	0.0408	0.7298	0.8991	1.6289	0.1964	0.8507	1.0471	0.0000	3,943.6225	3,943.6225	0.6797	0.0000	3,960.6136
2023	15.1584	17.3647	20.3150	0.0405	0.7298	0.7757	1.5055	0.1964	0.7340	0.9304	0.0000	3,912.3764	3,912.3764	0.6616	0.0000	3,928.9172
Maximum	15.8712	50.2569	32.6876	0.0636	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,168.2741	6,168.2741	1.9481	0.0000	6,216.9759

[illegible]

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6
Energy	0.1329	1.1354	0.4832	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.470 2	1,449.470 2	0.0278	0.0266	1,458.083 7
Mobile	3.2675	21.5109	33.3406	0.1424	10.4400	0.0943	10.5343	2.7966	0.0884	2.8850		14,496.35 25	14,496.35 25	0.5705		14,510.61 38
<b>Total</b>	<b>276.3340</b>	<b>27.9503</b>	<b>372.9343</b>	<b>0.7391</b>	<b>10.4400</b>	<b>45.8225</b>	<b>56.2625</b>	<b>2.7966</b>	<b>45.8166</b>	<b>48.6132</b>	<b>4,776.737 7</b>	<b>17,974.66 78</b>	<b>22,751.40 55</b>	<b>5.0309</b>	<b>0.4023</b>	<b>22,997.06 30</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6
Energy	0.1249	1.0673	0.4542	6.8100e-003		0.0863	0.0863		0.0863	0.0863		1,362.455 3	1,362.455 3	0.0261	0.0250	1,370.551 7
Mobile	3.2469	21.3383	32.7909	0.1400	10.2312	0.0926	10.3238	2.7407	0.0868	2.8275		14,248.55 54	14,248.55 54	0.5657		14,262.69 69
<b>Total</b>	<b>276.3054</b>	<b>27.7096</b>	<b>372.3556</b>	<b>0.7362</b>	<b>10.2312</b>	<b>45.8153</b>	<b>56.0465</b>	<b>2.7407</b>	<b>45.8095</b>	<b>48.5502</b>	<b>4,776.737 7</b>	<b>17,639.85 58</b>	<b>22,416.59 35</b>	<b>5.0244</b>	<b>0.4007</b>	<b>22,661.61 42</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.01	0.86	0.16	0.39	2.00	0.02	0.38	2.00	0.02	0.13	0.00	1.86	1.47	0.13	0.40	1.46

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/2/2020	4/10/2020	5	30	
2	Grading	Grading	4/13/2020	7/24/2020	5	75	
3	Paving	Paving	7/25/2020	10/9/2020	5	55	
4	Building Construction	Building Construction	10/10/2020	8/11/2023	5	740	
5	Architectural Coating	Architectural Coating	10/24/2020	8/25/2023	5	740	

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

**Acres of Grading (Grading Phase): 38.38**

**Acres of Paving: 0**

**Residential Indoor: 626,940; Residential Outdoor: 208,980; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	62.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.1 Mitigation Measures Construction****3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>		<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

**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	0.0836	0.0535	0.6564	1.4700e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		146.1679	146.1679	5.0900e-003		146.2951
<b>Total</b>	<b>0.0836</b>	<b>0.0535</b>	<b>0.6564</b>	<b>1.4700e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>146.1679</b>	<b>146.1679</b>	<b>5.0900e-003</b>		<b>146.2951</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.2 Site Preparation - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>	<b>0.0000</b>	<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

**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	0.0836	0.0535	0.6564	1.4700e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		146.1679	146.1679	5.0900e-003		146.2951
<b>Total</b>	<b>0.0836</b>	<b>0.0535</b>	<b>0.6564</b>	<b>1.4700e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>146.1679</b>	<b>146.1679</b>	<b>5.0900e-003</b>		<b>146.2951</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5648	0.0000	6.5648	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.865 3	6,005.865 3	1.9424		6,054.425 7
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>6.5648</b>	<b>2.1739</b>	<b>8.7387</b>	<b>3.3688</b>	<b>2.0000</b>	<b>5.3688</b>		<b>6,005.865 3</b>	<b>6,005.865 3</b>	<b>1.9424</b>		<b>6,054.425 7</b>

**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	0.0929	0.0594	0.7294	1.6300e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		162.4088	162.4088	5.6500e-003		162.5501
<b>Total</b>	<b>0.0929</b>	<b>0.0594</b>	<b>0.7294</b>	<b>1.6300e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>162.4088</b>	<b>162.4088</b>	<b>5.6500e-003</b>		<b>162.5501</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.3 Grading - 2020****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					6.5648	0.0000	6.5648	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>6.5648</b>	<b>2.1739</b>	<b>8.7387</b>	<b>3.3688</b>	<b>2.0000</b>	<b>5.3688</b>	<b>0.0000</b>	<b>6,005.865 3</b>	<b>6,005.865 3</b>	<b>1.9424</b>		<b>6,054.425 7</b>

**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	0.0929	0.0594	0.7294	1.6300e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		162.4088	162.4088	5.6500e-003		162.5501
<b>Total</b>	<b>0.0929</b>	<b>0.0594</b>	<b>0.7294</b>	<b>1.6300e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>162.4088</b>	<b>162.4088</b>	<b>5.6500e-003</b>		<b>162.5501</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.4 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

**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	0.0696	0.0446	0.5470	1.2200e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		121.8066	121.8066	4.2400e-003		121.9126
<b>Total</b>	<b>0.0696</b>	<b>0.0446</b>	<b>0.5470</b>	<b>1.2200e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>121.8066</b>	<b>121.8066</b>	<b>4.2400e-003</b>		<b>121.9126</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.4 Paving - 2020****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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

**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	0.0696	0.0446	0.5470	1.2200e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		121.8066	121.8066	4.2400e-003		121.9126
<b>Total</b>	<b>0.0696</b>	<b>0.0446</b>	<b>0.5470</b>	<b>1.2200e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>121.8066</b>	<b>121.8066</b>	<b>4.2400e-003</b>		<b>121.9126</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

**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	0.0761	2.1979	0.4386	5.3400e-003	0.1219	0.0126	0.1346	0.0351	0.0121	0.0472		558.6348	558.6348	0.0340		559.4845
Worker	0.2879	0.1842	2.2610	5.0600e-003	0.5093	3.2100e-003	0.5125	0.1351	2.9500e-003	0.1381		503.4673	503.4673	0.0175		503.9054
<b>Total</b>	<b>0.3640</b>	<b>2.3821</b>	<b>2.6997</b>	<b>0.0104</b>	<b>0.6313</b>	<b>0.0158</b>	<b>0.6471</b>	<b>0.1702</b>	<b>0.0150</b>	<b>0.1852</b>		<b>1,062.102 1</b>	<b>1,062.102 1</b>	<b>0.0515</b>		<b>1,063.389 9</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 Building Construction - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

**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	0.0761	2.1979	0.4386	5.3400e-003	0.1219	0.0126	0.1346	0.0351	0.0121	0.0472		558.6348	558.6348	0.0340		559.4845
Worker	0.2879	0.1842	2.2610	5.0600e-003	0.5093	3.2100e-003	0.5125	0.1351	2.9500e-003	0.1381		503.4673	503.4673	0.0175		503.9054
<b>Total</b>	<b>0.3640</b>	<b>2.3821</b>	<b>2.6997</b>	<b>0.0104</b>	<b>0.6313</b>	<b>0.0158</b>	<b>0.6471</b>	<b>0.1702</b>	<b>0.0150</b>	<b>0.1852</b>		<b>1,062.102 1</b>	<b>1,062.102 1</b>	<b>0.0515</b>		<b>1,063.389 9</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

**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	0.0605	1.9941	0.3671	5.2900e-003	0.1219	5.5100e-003	0.1275	0.0351	5.2700e-003	0.0404		554.1480	554.1480	0.0336		554.9886
Worker	0.2627	0.1622	2.0333	4.8800e-003	0.5093	3.1000e-003	0.5124	0.1351	2.8500e-003	0.1380		485.6872	485.6872	0.0153		486.0706
<b>Total</b>	<b>0.3233</b>	<b>2.1563</b>	<b>2.4004</b>	<b>0.0102</b>	<b>0.6313</b>	<b>8.6100e-003</b>	<b>0.6399</b>	<b>0.1702</b>	<b>8.1200e-003</b>	<b>0.1783</b>		<b>1,039.8352</b>	<b>1,039.8352</b>	<b>0.0490</b>		<b>1,041.0592</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 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	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.363 9</b>	<b>2,553.363 9</b>	<b>0.6160</b>		<b>2,568.764 3</b>

**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	0.0605	1.9941	0.3671	5.2900e-003	0.1219	5.5100e-003	0.1275	0.0351	5.2700e-003	0.0404		554.1480	554.1480	0.0336		554.9886
Worker	0.2627	0.1622	2.0333	4.8800e-003	0.5093	3.1000e-003	0.5124	0.1351	2.8500e-003	0.1380		485.6872	485.6872	0.0153		486.0706
<b>Total</b>	<b>0.3233</b>	<b>2.1563</b>	<b>2.4004</b>	<b>0.0102</b>	<b>0.6313</b>	<b>8.6100e-003</b>	<b>0.6399</b>	<b>0.1702</b>	<b>8.1200e-003</b>	<b>0.1783</b>		<b>1,039.835 2</b>	<b>1,039.835 2</b>	<b>0.0490</b>		<b>1,041.059 2</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 Building Construction - 2022****Unmitigated Construction On-Site**

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

**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	0.0557	1.8926	0.3301	5.2500e-003	0.1219	4.7500e-003	0.1267	0.0351	4.5400e-003	0.0397		549.5461	549.5461	0.0334		550.3809
Worker	0.2406	0.1432	1.8308	4.7000e-003	0.5093	3.0000e-003	0.5123	0.1351	2.7600e-003	0.1379		467.7605	467.7605	0.0134		468.0952
<b>Total</b>	<b>0.2963</b>	<b>2.0359</b>	<b>2.1609</b>	<b>9.9500e-003</b>	<b>0.6313</b>	<b>7.7500e-003</b>	<b>0.6390</b>	<b>0.1702</b>	<b>7.3000e-003</b>	<b>0.1775</b>		<b>1,017.3066</b>	<b>1,017.3066</b>	<b>0.0468</b>		<b>1,018.4762</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 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
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

**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	0.0557	1.8926	0.3301	5.2500e-003	0.1219	4.7500e-003	0.1267	0.0351	4.5400e-003	0.0397		549.5461	549.5461	0.0334		550.3809
Worker	0.2406	0.1432	1.8308	4.7000e-003	0.5093	3.0000e-003	0.5123	0.1351	2.7600e-003	0.1379		467.7605	467.7605	0.0134		468.0952
<b>Total</b>	<b>0.2963</b>	<b>2.0359</b>	<b>2.1609</b>	<b>9.9500e-003</b>	<b>0.6313</b>	<b>7.7500e-003</b>	<b>0.6390</b>	<b>0.1702</b>	<b>7.3000e-003</b>	<b>0.1775</b>		<b>1,017.3066</b>	<b>1,017.3066</b>	<b>0.0468</b>		<b>1,018.4762</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 Building Construction - 2023****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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

**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	0.0398	1.5250	0.2737	5.1500e-003	0.1219	1.6400e-003	0.1236	0.0351	1.5700e-003	0.0367		538.8342	538.8342	0.0229		539.4064
Worker	0.2218	0.1272	1.6642	4.5200e-003	0.5093	2.9200e-003	0.5122	0.1351	2.6800e-003	0.1378		449.8219	449.8219	0.0118		450.1164
<b>Total</b>	<b>0.2616</b>	<b>1.6522</b>	<b>1.9378</b>	<b>9.6700e-003</b>	<b>0.6313</b>	<b>4.5600e-003</b>	<b>0.6358</b>	<b>0.1702</b>	<b>4.2500e-003</b>	<b>0.1745</b>		<b>988.6561</b>	<b>988.6561</b>	<b>0.0347</b>		<b>989.5228</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.5 Building Construction - 2023****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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

**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	0.0398	1.5250	0.2737	5.1500e-003	0.1219	1.6400e-003	0.1236	0.0351	1.5700e-003	0.0367		538.8342	538.8342	0.0229		539.4064
Worker	0.2218	0.1272	1.6642	4.5200e-003	0.5093	2.9200e-003	0.5122	0.1351	2.6800e-003	0.1378		449.8219	449.8219	0.0118		450.1164
<b>Total</b>	<b>0.2616</b>	<b>1.6522</b>	<b>1.9378</b>	<b>9.6700e-003</b>	<b>0.6313</b>	<b>4.5600e-003</b>	<b>0.6358</b>	<b>0.1702</b>	<b>4.2500e-003</b>	<b>0.1745</b>		<b>988.6561</b>	<b>988.6561</b>	<b>0.0347</b>		<b>989.5228</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.3317</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

**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	0.0557	0.0357	0.4376	9.8000e-004	0.0986	6.2000e-004	0.0992	0.0262	5.7000e-004	0.0267		97.4453	97.4453	3.3900e-003		97.5301
<b>Total</b>	<b>0.0557</b>	<b>0.0357</b>	<b>0.4376</b>	<b>9.8000e-004</b>	<b>0.0986</b>	<b>6.2000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.7000e-004</b>	<b>0.0267</b>		<b>97.4453</b>	<b>97.4453</b>	<b>3.3900e-003</b>		<b>97.5301</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 Architectural Coating - 2020****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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.3317</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

**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	0.0557	0.0357	0.4376	9.8000e-004	0.0986	6.2000e-004	0.0992	0.0262	5.7000e-004	0.0267		97.4453	97.4453	3.3900e-003		97.5301
<b>Total</b>	<b>0.0557</b>	<b>0.0357</b>	<b>0.4376</b>	<b>9.8000e-004</b>	<b>0.0986</b>	<b>6.2000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.7000e-004</b>	<b>0.0267</b>		<b>97.4453</b>	<b>97.4453</b>	<b>3.3900e-003</b>		<b>97.5301</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>13.3084</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

**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	0.0509	0.0314	0.3935	9.4000e-004	0.0986	6.0000e-004	0.0992	0.0262	5.5000e-004	0.0267		94.0040	94.0040	2.9700e-003		94.0782
<b>Total</b>	<b>0.0509</b>	<b>0.0314</b>	<b>0.3935</b>	<b>9.4000e-004</b>	<b>0.0986</b>	<b>6.0000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.5000e-004</b>	<b>0.0267</b>		<b>94.0040</b>	<b>94.0040</b>	<b>2.9700e-003</b>		<b>94.0782</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>13.3084</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

**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	0.0509	0.0314	0.3935	9.4000e-004	0.0986	6.0000e-004	0.0992	0.0262	5.5000e-004	0.0267		94.0040	94.0040	2.9700e-003		94.0782
<b>Total</b>	<b>0.0509</b>	<b>0.0314</b>	<b>0.3935</b>	<b>9.4000e-004</b>	<b>0.0986</b>	<b>6.0000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.5000e-004</b>	<b>0.0267</b>		<b>94.0040</b>	<b>94.0040</b>	<b>2.9700e-003</b>		<b>94.0782</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>13.2940</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

**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	0.0466	0.0277	0.3543	9.1000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.3000e-004	0.0267		90.5343	90.5343	2.5900e-003		90.5991
<b>Total</b>	<b>0.0466</b>	<b>0.0277</b>	<b>0.3543</b>	<b>9.1000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.3000e-004</b>	<b>0.0267</b>		<b>90.5343</b>	<b>90.5343</b>	<b>2.5900e-003</b>		<b>90.5991</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>13.2940</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

**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	0.0466	0.0277	0.3543	9.1000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.3000e-004	0.0267		90.5343	90.5343	2.5900e-003		90.5991
<b>Total</b>	<b>0.0466</b>	<b>0.0277</b>	<b>0.3543</b>	<b>9.1000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.3000e-004</b>	<b>0.0267</b>		<b>90.5343</b>	<b>90.5343</b>	<b>2.5900e-003</b>		<b>90.5991</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 Architectural Coating - 2023****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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>13.2812</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

**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	0.0429	0.0246	0.3221	8.7000e-004	0.0986	5.6000e-004	0.0991	0.0262	5.2000e-004	0.0267		87.0623	87.0623	2.2800e-003		87.1193
<b>Total</b>	<b>0.0429</b>	<b>0.0246</b>	<b>0.3221</b>	<b>8.7000e-004</b>	<b>0.0986</b>	<b>5.6000e-004</b>	<b>0.0991</b>	<b>0.0262</b>	<b>5.2000e-004</b>	<b>0.0267</b>		<b>87.0623</b>	<b>87.0623</b>	<b>2.2800e-003</b>		<b>87.1193</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**3.6 Architectural Coating - 2023****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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>13.2812</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

**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	0.0429	0.0246	0.3221	8.7000e-004	0.0986	5.6000e-004	0.0991	0.0262	5.2000e-004	0.0267		87.0623	87.0623	2.2800e-003		87.1193
<b>Total</b>	<b>0.0429</b>	<b>0.0246</b>	<b>0.3221</b>	<b>8.7000e-004</b>	<b>0.0986</b>	<b>5.6000e-004</b>	<b>0.0991</b>	<b>0.0262</b>	<b>5.2000e-004</b>	<b>0.0267</b>		<b>87.0623</b>	<b>87.0623</b>	<b>2.2800e-003</b>		<b>87.1193</b>

**4.0 Operational Detail - Mobile**

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**4.1 Mitigation Measures Mobile**

## Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2469	21.3383	32.7909	0.1400	10.2312	0.0926	10.3238	2.7407	0.0868	2.8275		14,248.55 54	14,248.55 54	0.5657		14,262.69 69
Unmitigated	3.2675	21.5109	33.3406	0.1424	10.4400	0.0943	10.5343	2.7966	0.0884	2.8850		14,496.35 25	14,496.35 25	0.5705		14,510.61 38

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,637.44	1,704.52	1482.64	4,654,620	4,561,527
Total	1,637.44	1,704.52	1,482.64	4,654,620	4,561,527

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

**4.4 Fleet Mix**

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.573673	0.026974	0.167669	0.101176	0.022318	0.005013	0.020723	0.074482	0.001168	0.000968	0.004119	0.001026	0.000692

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive 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	0.1249	1.0673	0.4542	6.8100e-003		0.0863	0.0863		0.0863	0.0863		1,362.4553	1,362.4553	0.0261	0.0250	1,370.5517
NaturalGas Unmitigated	0.1329	1.1354	0.4832	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.4702	1,449.4702	0.0278	0.0266	1,458.0837

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	12320.5	0.1329	1.1354	0.4832	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.4702	1,449.4702	0.0278	0.0266	1,458.0837
<b>Total</b>		<b>0.1329</b>	<b>1.1354</b>	<b>0.4832</b>	<b>7.2500e-003</b>		<b>0.0918</b>	<b>0.0918</b>		<b>0.0918</b>	<b>0.0918</b>		<b>1,449.4702</b>	<b>1,449.4702</b>	<b>0.0278</b>	<b>0.0266</b>	<b>1,458.0837</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	11.5809	0.1249	1.0673	0.4542	6.8100e-003		0.0863	0.0863		0.0863	0.0863		1,362.4553	1,362.4553	0.0261	0.0250	1,370.5517
<b>Total</b>		<b>0.1249</b>	<b>1.0673</b>	<b>0.4542</b>	<b>6.8100e-003</b>		<b>0.0863</b>	<b>0.0863</b>		<b>0.0863</b>	<b>0.0863</b>		<b>1,362.4553</b>	<b>1,362.4553</b>	<b>0.0261</b>	<b>0.0250</b>	<b>1,370.5517</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6
Unmitigated	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6

## 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	2.6538					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	263.2279	5.1405	324.9263	0.5887		45.5578	45.5578		45.5578	45.5578	4,776.737 7	2,003.294 1	6,780.031 8	4.4081	0.3757	7,002.201 7
Landscaping	0.4265	0.1634	14.1843	7.5000e-004		0.0786	0.0786		0.0786	0.0786		25.5510	25.5510	0.0245		26.1639
<b>Total</b>	<b>272.9336</b>	<b>5.3040</b>	<b>339.1105</b>	<b>0.5894</b>		<b>45.6364</b>	<b>45.6364</b>		<b>45.6364</b>	<b>45.6364</b>	<b>4,776.737 7</b>	<b>2,028.845 1</b>	<b>6,805.582 8</b>	<b>4.4327</b>	<b>0.3757</b>	<b>7,028.365 6</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6538					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	263.2279	5.1405	324.9263	0.5887		45.5578	45.5578		45.5578	45.5578	4,776.737 7	2,003.294 1	6,780.031 8	4.4081	0.3757	7,002.201 7
Landscaping	0.4265	0.1634	14.1843	7.5000e-004		0.0786	0.0786		0.0786	0.0786		25.5510	25.5510	0.0245		26.1639
<b>Total</b>	<b>272.9336</b>	<b>5.3040</b>	<b>339.1105</b>	<b>0.5894</b>		<b>45.6364</b>	<b>45.6364</b>		<b>45.6364</b>	<b>45.6364</b>	<b>4,776.737 7</b>	<b>2,028.845 1</b>	<b>6,805.582 8</b>	<b>4.4327</b>	<b>0.3757</b>	<b>7,028.365 6</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## Orchard View I and II Subdivision - Feather River AQMD Air District, Summer

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

## Orchard View I and II Subdivision

### Feather River AQMD Air District, Winter

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	172.00	Dwelling Unit	38.38	309,600.00	492

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	67
<b>Climate Zone</b>	3			<b>Operational Year</b>	2024
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	245.88	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Project Characteristics - CO2 intensity factor adjusted per PG&E's RPS projections.

Land Use - acreage updated per site plans

Construction Phase - total days of architectural coating were set to match total days of building construction to represent the two phases happening concurrently.

Grading - total acres graded set to total acreage of the project site

Mobile Land Use Mitigation -

Energy Mitigation -

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	740.00
tblConstructionPhase	PhaseEndDate	1/5/2024	8/25/2023
tblConstructionPhase	PhaseEndDate	8/4/2023	8/11/2023
tblConstructionPhase	PhaseEndDate	10/2/2020	7/24/2020
tblConstructionPhase	PhaseEndDate	10/20/2023	10/9/2020
tblConstructionPhase	PhaseEndDate	6/19/2020	4/10/2020
tblConstructionPhase	PhaseStartDate	10/21/2023	10/24/2020
tblConstructionPhase	PhaseStartDate	10/3/2020	10/10/2020
tblConstructionPhase	PhaseStartDate	6/20/2020	4/13/2020
tblConstructionPhase	PhaseStartDate	8/5/2023	7/25/2020
tblConstructionPhase	PhaseStartDate	5/9/2020	3/2/2020
tblGrading	AcresOfGrading	187.50	38.38
tblLandUse	LotAcreage	55.84	38.38
tblProjectCharacteristics	CO2IntensityFactor	641.35	245.88

## 2.0 Emissions Summary

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## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	15.8479	50.2718	32.5943	0.0634	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,148.085 8	6,148.085 8	1.9474	0.0000	6,196.771 6
2021	15.5625	21.2202	20.9452	0.0401	0.7298	1.0622	1.7920	0.1964	1.0043	1.2007	0.0000	3,877.748 2	3,877.748 2	0.6897	0.0000	3,894.991 0
2022	15.3248	19.1504	20.4622	0.0399	0.7298	0.8993	1.6292	0.1964	0.8510	1.0473	0.0000	3,855.377 9	3,855.377 9	0.6824	0.0000	3,872.436 5
2023	15.1415	17.4138	20.0827	0.0396	0.7298	0.7757	1.5056	0.1964	0.7341	0.9304	0.0000	3,827.193 2	3,827.193 2	0.6631	0.0000	3,843.7711
Maximum	15.8479	50.2718	32.5943	0.0634	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,148.085 8	6,148.085 8	1.9474	0.0000	6,196.771 6

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	15.8479	50.2718	32.5943	0.0634	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,148.0857	6,148.0857	1.9474	0.0000	6,196.7716
2021	15.5625	21.2202	20.9452	0.0401	0.7298	1.0622	1.7920	0.1964	1.0043	1.2007	0.0000	3,877.7482	3,877.7482	0.6897	0.0000	3,894.9910
2022	15.3248	19.1504	20.4622	0.0399	0.7298	0.8993	1.6292	0.1964	0.8510	1.0473	0.0000	3,855.3779	3,855.3779	0.6824	0.0000	3,872.4365
2023	15.1415	17.4138	20.0827	0.0396	0.7298	0.7757	1.5056	0.1964	0.7341	0.9304	0.0000	3,827.1932	3,827.1932	0.6631	0.0000	3,843.7711
Maximum	15.8479	50.2718	32.5943	0.0634	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	6,148.0857	6,148.0857	1.9474	0.0000	6,196.7716

[illegible]

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6
Energy	0.1329	1.1354	0.4832	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.470 2	1,449.470 2	0.0278	0.0266	1,458.083 7
Mobile	2.5102	22.3021	30.9008	0.1304	10.4400	0.0950	10.5350	2.7966	0.0891	2.8857		13,285.10 99	13,285.10 99	0.5996		13,300.09 95
<b>Total</b>	<b>275.5767</b>	<b>28.7414</b>	<b>370.4945</b>	<b>0.7270</b>	<b>10.4400</b>	<b>45.8232</b>	<b>56.2631</b>	<b>2.7966</b>	<b>45.8173</b>	<b>48.6139</b>	<b>4,776.737 7</b>	<b>16,763.42 52</b>	<b>21,540.16 29</b>	<b>5.0600</b>	<b>0.4023</b>	<b>21,786.54 88</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6
Energy	0.1249	1.0673	0.4542	6.8100e-003		0.0863	0.0863		0.0863	0.0863		1,362.455 3	1,362.455 3	0.0261	0.0250	1,370.551 7
Mobile	2.4906	22.1080	30.4622	0.1281	10.2312	0.0933	10.3245	2.7407	0.0875	2.8282		13,056.49 99	13,056.49 99	0.5953		13,071.38 35
<b>Total</b>	<b>275.5491</b>	<b>28.4792</b>	<b>370.0269</b>	<b>0.7244</b>	<b>10.2312</b>	<b>45.8160</b>	<b>56.0471</b>	<b>2.7407</b>	<b>45.8102</b>	<b>48.5508</b>	<b>4,776.737 7</b>	<b>16,447.80 03</b>	<b>21,224.53 80</b>	<b>5.0541</b>	<b>0.4007</b>	<b>21,470.30 08</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.01	0.91	0.13	0.37	2.00	0.02	0.38	2.00	0.02	0.13	0.00	1.88	1.47	0.12	0.40	1.45

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/2/2020	4/10/2020	5	30	
2	Grading	Grading	4/13/2020	7/24/2020	5	75	
3	Paving	Paving	7/25/2020	10/9/2020	5	55	
4	Building Construction	Building Construction	10/10/2020	8/11/2023	5	740	
5	Architectural Coating	Architectural Coating	10/24/2020	8/25/2023	5	740	

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

**Acres of Grading (Grading Phase): 38.38**

**Acres of Paving: 0**

**Residential Indoor: 626,940; Residential Outdoor: 208,980; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	62.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.1 Mitigation Measures Construction****3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>		<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

**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	0.0769	0.0669	0.5724	1.2900e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		127.9984	127.9984	4.5100e-003		128.1112
<b>Total</b>	<b>0.0769</b>	<b>0.0669</b>	<b>0.5724</b>	<b>1.2900e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>127.9984</b>	<b>127.9984</b>	<b>4.5100e-003</b>		<b>128.1112</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.2 Site Preparation - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>	<b>0.0000</b>	<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

**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	0.0769	0.0669	0.5724	1.2900e-003	0.1479	9.3000e-004	0.1488	0.0392	8.6000e-004	0.0401		127.9984	127.9984	4.5100e-003		128.1112
<b>Total</b>	<b>0.0769</b>	<b>0.0669</b>	<b>0.5724</b>	<b>1.2900e-003</b>	<b>0.1479</b>	<b>9.3000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.6000e-004</b>	<b>0.0401</b>		<b>127.9984</b>	<b>127.9984</b>	<b>4.5100e-003</b>		<b>128.1112</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5648	0.0000	6.5648	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.865 3	6,005.865 3	1.9424		6,054.425 7
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>6.5648</b>	<b>2.1739</b>	<b>8.7387</b>	<b>3.3688</b>	<b>2.0000</b>	<b>5.3688</b>		<b>6,005.865 3</b>	<b>6,005.865 3</b>	<b>1.9424</b>		<b>6,054.425 7</b>

**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	0.0855	0.0743	0.6360	1.4300e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		142.2205	142.2205	5.0100e-003		142.3458
<b>Total</b>	<b>0.0855</b>	<b>0.0743</b>	<b>0.6360</b>	<b>1.4300e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>142.2205</b>	<b>142.2205</b>	<b>5.0100e-003</b>		<b>142.3458</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.3 Grading - 2020****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					6.5648	0.0000	6.5648	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>6.5648</b>	<b>2.1739</b>	<b>8.7387</b>	<b>3.3688</b>	<b>2.0000</b>	<b>5.3688</b>	<b>0.0000</b>	<b>6,005.865 3</b>	<b>6,005.865 3</b>	<b>1.9424</b>		<b>6,054.425 7</b>

**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	0.0855	0.0743	0.6360	1.4300e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		142.2205	142.2205	5.0100e-003		142.3458
<b>Total</b>	<b>0.0855</b>	<b>0.0743</b>	<b>0.6360</b>	<b>1.4300e-003</b>	<b>0.1643</b>	<b>1.0300e-003</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.5000e-004</b>	<b>0.0445</b>		<b>142.2205</b>	<b>142.2205</b>	<b>5.0100e-003</b>		<b>142.3458</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.4 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

**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	0.0641	0.0557	0.4770	1.0700e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		106.6654	106.6654	3.7600e-003		106.7594
<b>Total</b>	<b>0.0641</b>	<b>0.0557</b>	<b>0.4770</b>	<b>1.0700e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>106.6654</b>	<b>106.6654</b>	<b>3.7600e-003</b>		<b>106.7594</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.4 Paving - 2020****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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

**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	0.0641	0.0557	0.4770	1.0700e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		106.6654	106.6654	3.7600e-003		106.7594
<b>Total</b>	<b>0.0641</b>	<b>0.0557</b>	<b>0.4770</b>	<b>1.0700e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>106.6654</b>	<b>106.6654</b>	<b>3.7600e-003</b>		<b>106.7594</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

**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	0.0801	2.2357	0.5274	5.1600e-003	0.1219	0.0129	0.1349	0.0351	0.0124	0.0475		539.7511	539.7511	0.0385		540.7138
Worker	0.2650	0.2304	1.9717	4.4300e-003	0.5093	3.2100e-003	0.5125	0.1351	2.9500e-003	0.1381		440.8835	440.8835	0.0155		441.2721
<b>Total</b>	<b>0.3451</b>	<b>2.4661</b>	<b>2.4991</b>	<b>9.5900e-003</b>	<b>0.6313</b>	<b>0.0162</b>	<b>0.6474</b>	<b>0.1702</b>	<b>0.0153</b>	<b>0.1855</b>		<b>980.6346</b>	<b>980.6346</b>	<b>0.0541</b>		<b>981.9859</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 Building Construction - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

**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	0.0801	2.2357	0.5274	5.1600e-003	0.1219	0.0129	0.1349	0.0351	0.0124	0.0475		539.7511	539.7511	0.0385		540.7138
Worker	0.2650	0.2304	1.9717	4.4300e-003	0.5093	3.2100e-003	0.5125	0.1351	2.9500e-003	0.1381		440.8835	440.8835	0.0155		441.2721
<b>Total</b>	<b>0.3451</b>	<b>2.4661</b>	<b>2.4991</b>	<b>9.5900e-003</b>	<b>0.6313</b>	<b>0.0162</b>	<b>0.6474</b>	<b>0.1702</b>	<b>0.0153</b>	<b>0.1855</b>		<b>980.6346</b>	<b>980.6346</b>	<b>0.0541</b>		<b>981.9859</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

**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	0.0642	2.0193	0.4475	5.1200e-003	0.1219	5.7900e-003	0.1277	0.0351	5.5400e-003	0.0407		535.3029	535.3029	0.0382		536.2575
Worker	0.2421	0.2028	1.7636	4.2700e-003	0.5093	3.1000e-003	0.5124	0.1351	2.8500e-003	0.1380		425.3144	425.3144	0.0136		425.6537
<b>Total</b>	<b>0.3063</b>	<b>2.2221</b>	<b>2.2111</b>	<b>9.3900e-003</b>	<b>0.6313</b>	<b>8.8900e-003</b>	<b>0.6401</b>	<b>0.1702</b>	<b>8.3900e-003</b>	<b>0.1786</b>		<b>960.6174</b>	<b>960.6174</b>	<b>0.0518</b>		<b>961.9112</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 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
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

**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	0.0642	2.0193	0.4475	5.1200e-003	0.1219	5.7900e-003	0.1277	0.0351	5.5400e-003	0.0407		535.3029	535.3029	0.0382		536.2575
Worker	0.2421	0.2028	1.7636	4.2700e-003	0.5093	3.1000e-003	0.5124	0.1351	2.8500e-003	0.1380		425.3144	425.3144	0.0136		425.6537
<b>Total</b>	<b>0.3063</b>	<b>2.2221</b>	<b>2.2111</b>	<b>9.3900e-003</b>	<b>0.6313</b>	<b>8.8900e-003</b>	<b>0.6401</b>	<b>0.1702</b>	<b>8.3900e-003</b>	<b>0.1786</b>		<b>960.6174</b>	<b>960.6174</b>	<b>0.0518</b>		<b>961.9112</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 Building Construction - 2022****Unmitigated Construction On-Site**

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

**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	0.0591	1.9129	0.4033	5.0700e-003	0.1219	5.0100e-003	0.1270	0.0351	4.8000e-003	0.0399		530.6825	530.6825	0.0380		531.6320
Worker	0.2224	0.1788	1.5767	4.1100e-003	0.5093	3.0000e-003	0.5123	0.1351	2.7600e-003	0.1379		409.6305	409.6305	0.0118		409.9257
<b>Total</b>	<b>0.2815</b>	<b>2.0917</b>	<b>1.9801</b>	<b>9.1800e-003</b>	<b>0.6313</b>	<b>8.0100e-003</b>	<b>0.6393</b>	<b>0.1702</b>	<b>7.5600e-003</b>	<b>0.1778</b>		<b>940.3129</b>	<b>940.3129</b>	<b>0.0498</b>		<b>941.5577</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 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
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

**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	0.0591	1.9129	0.4033	5.0700e-003	0.1219	5.0100e-003	0.1270	0.0351	4.8000e-003	0.0399		530.6825	530.6825	0.0380		531.6320
Worker	0.2224	0.1788	1.5767	4.1100e-003	0.5093	3.0000e-003	0.5123	0.1351	2.7600e-003	0.1379		409.6305	409.6305	0.0118		409.9257
<b>Total</b>	<b>0.2815</b>	<b>2.0917</b>	<b>1.9801</b>	<b>9.1800e-003</b>	<b>0.6313</b>	<b>8.0100e-003</b>	<b>0.6393</b>	<b>0.1702</b>	<b>7.5600e-003</b>	<b>0.1778</b>		<b>940.3129</b>	<b>940.3129</b>	<b>0.0498</b>		<b>941.5577</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 Building Construction - 2023****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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

**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	0.0422	1.5365	0.3276	4.9700e-003	0.1219	1.6900e-003	0.1236	0.0351	1.6200e-003	0.0367		520.3419	520.3419	0.0261		520.9937
Worker	0.2055	0.1587	1.4243	3.9600e-003	0.5093	2.9200e-003	0.5122	0.1351	2.6800e-003	0.1378		393.9458	393.9458	0.0104		394.2047
<b>Total</b>	<b>0.2478</b>	<b>1.6952</b>	<b>1.7519</b>	<b>8.9300e-003</b>	<b>0.6313</b>	<b>4.6100e-003</b>	<b>0.6359</b>	<b>0.1702</b>	<b>4.3000e-003</b>	<b>0.1745</b>		<b>914.2877</b>	<b>914.2877</b>	<b>0.0364</b>		<b>915.1984</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.5 Building Construction - 2023****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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

**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	0.0422	1.5365	0.3276	4.9700e-003	0.1219	1.6900e-003	0.1236	0.0351	1.6200e-003	0.0367		520.3419	520.3419	0.0261		520.9937
Worker	0.2055	0.1587	1.4243	3.9600e-003	0.5093	2.9200e-003	0.5122	0.1351	2.6800e-003	0.1378		393.9458	393.9458	0.0104		394.2047
<b>Total</b>	<b>0.2478</b>	<b>1.6952</b>	<b>1.7519</b>	<b>8.9300e-003</b>	<b>0.6313</b>	<b>4.6100e-003</b>	<b>0.6359</b>	<b>0.1702</b>	<b>4.3000e-003</b>	<b>0.1745</b>		<b>914.2877</b>	<b>914.2877</b>	<b>0.0364</b>		<b>915.1984</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.3317</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

**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	0.0513	0.0446	0.3816	8.6000e-004	0.0986	6.2000e-004	0.0992	0.0262	5.7000e-004	0.0267		85.3323	85.3323	3.0100e-003		85.4075
<b>Total</b>	<b>0.0513</b>	<b>0.0446</b>	<b>0.3816</b>	<b>8.6000e-004</b>	<b>0.0986</b>	<b>6.2000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.7000e-004</b>	<b>0.0267</b>		<b>85.3323</b>	<b>85.3323</b>	<b>3.0100e-003</b>		<b>85.4075</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 Architectural Coating - 2020****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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.3317</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

**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	0.0513	0.0446	0.3816	8.6000e-004	0.0986	6.2000e-004	0.0992	0.0262	5.7000e-004	0.0267		85.3323	85.3323	3.0100e-003		85.4075
<b>Total</b>	<b>0.0513</b>	<b>0.0446</b>	<b>0.3816</b>	<b>8.6000e-004</b>	<b>0.0986</b>	<b>6.2000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.7000e-004</b>	<b>0.0267</b>		<b>85.3323</b>	<b>85.3323</b>	<b>3.0100e-003</b>		<b>85.4075</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>13.3084</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

**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	0.0469	0.0392	0.3414	8.3000e-004	0.0986	6.0000e-004	0.0992	0.0262	5.5000e-004	0.0267		82.3189	82.3189	2.6300e-003		82.3846
<b>Total</b>	<b>0.0469</b>	<b>0.0392</b>	<b>0.3414</b>	<b>8.3000e-004</b>	<b>0.0986</b>	<b>6.0000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.5000e-004</b>	<b>0.0267</b>		<b>82.3189</b>	<b>82.3189</b>	<b>2.6300e-003</b>		<b>82.3846</b>



## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>13.3084</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

**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	0.0469	0.0392	0.3414	8.3000e-004	0.0986	6.0000e-004	0.0992	0.0262	5.5000e-004	0.0267		82.3189	82.3189	2.6300e-003		82.3846
<b>Total</b>	<b>0.0469</b>	<b>0.0392</b>	<b>0.3414</b>	<b>8.3000e-004</b>	<b>0.0986</b>	<b>6.0000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.5000e-004</b>	<b>0.0267</b>		<b>82.3189</b>	<b>82.3189</b>	<b>2.6300e-003</b>		<b>82.3846</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>13.2940</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

**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	0.0430	0.0346	0.3052	8.0000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.3000e-004	0.0267		79.2833	79.2833	2.2900e-003		79.3405
<b>Total</b>	<b>0.0430</b>	<b>0.0346</b>	<b>0.3052</b>	<b>8.0000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.3000e-004</b>	<b>0.0267</b>		<b>79.2833</b>	<b>79.2833</b>	<b>2.2900e-003</b>		<b>79.3405</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>13.2940</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

**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	0.0430	0.0346	0.3052	8.0000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.3000e-004	0.0267		79.2833	79.2833	2.2900e-003		79.3405
<b>Total</b>	<b>0.0430</b>	<b>0.0346</b>	<b>0.3052</b>	<b>8.0000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.3000e-004</b>	<b>0.0267</b>		<b>79.2833</b>	<b>79.2833</b>	<b>2.2900e-003</b>		<b>79.3405</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 Architectural Coating - 2023****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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>13.2812</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

**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	0.0398	0.0307	0.2757	7.7000e-004	0.0986	5.6000e-004	0.0991	0.0262	5.2000e-004	0.0267		76.2476	76.2476	2.0000e-003		76.2977
<b>Total</b>	<b>0.0398</b>	<b>0.0307</b>	<b>0.2757</b>	<b>7.7000e-004</b>	<b>0.0986</b>	<b>5.6000e-004</b>	<b>0.0991</b>	<b>0.0262</b>	<b>5.2000e-004</b>	<b>0.0267</b>		<b>76.2476</b>	<b>76.2476</b>	<b>2.0000e-003</b>		<b>76.2977</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**3.6 Architectural Coating - 2023****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	13.0895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>13.2812</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

**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	0.0398	0.0307	0.2757	7.7000e-004	0.0986	5.6000e-004	0.0991	0.0262	5.2000e-004	0.0267		76.2476	76.2476	2.0000e-003		76.2977
<b>Total</b>	<b>0.0398</b>	<b>0.0307</b>	<b>0.2757</b>	<b>7.7000e-004</b>	<b>0.0986</b>	<b>5.6000e-004</b>	<b>0.0991</b>	<b>0.0262</b>	<b>5.2000e-004</b>	<b>0.0267</b>		<b>76.2476</b>	<b>76.2476</b>	<b>2.0000e-003</b>		<b>76.2977</b>

**4.0 Operational Detail - Mobile**

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**4.1 Mitigation Measures Mobile**

## Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4906	22.1080	30.4622	0.1281	10.2312	0.0933	10.3245	2.7407	0.0875	2.8282		13,056.49 99	13,056.49 99	0.5953		13,071.38 35
Unmitigated	2.5102	22.3021	30.9008	0.1304	10.4400	0.0950	10.5350	2.7966	0.0891	2.8857		13,285.10 99	13,285.10 99	0.5996		13,300.09 95

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,637.44	1,704.52	1482.64	4,654,620	4,561,527
Total	1,637.44	1,704.52	1,482.64	4,654,620	4,561,527

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

**4.4 Fleet Mix**

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.573673	0.026974	0.167669	0.101176	0.022318	0.005013	0.020723	0.074482	0.001168	0.000968	0.004119	0.001026	0.000692

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive 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	0.1249	1.0673	0.4542	6.8100e-003		0.0863	0.0863		0.0863	0.0863		1,362.4553	1,362.4553	0.0261	0.0250	1,370.5517
NaturalGas Unmitigated	0.1329	1.1354	0.4832	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.4702	1,449.4702	0.0278	0.0266	1,458.0837

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	12320.5	0.1329	1.1354	0.4832	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.4702	1,449.4702	0.0278	0.0266	1,458.0837
<b>Total</b>		<b>0.1329</b>	<b>1.1354</b>	<b>0.4832</b>	<b>7.2500e-003</b>		<b>0.0918</b>	<b>0.0918</b>		<b>0.0918</b>	<b>0.0918</b>		<b>1,449.4702</b>	<b>1,449.4702</b>	<b>0.0278</b>	<b>0.0266</b>	<b>1,458.0837</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	11.5809	0.1249	1.0673	0.4542	6.8100e-003		0.0863	0.0863		0.0863	0.0863		1,362.4553	1,362.4553	0.0261	0.0250	1,370.5517
<b>Total</b>		<b>0.1249</b>	<b>1.0673</b>	<b>0.4542</b>	<b>6.8100e-003</b>		<b>0.0863</b>	<b>0.0863</b>		<b>0.0863</b>	<b>0.0863</b>		<b>1,362.4553</b>	<b>1,362.4553</b>	<b>0.0261</b>	<b>0.0250</b>	<b>1,370.5517</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**



## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6
Unmitigated	272.9336	5.3040	339.1105	0.5894		45.6364	45.6364		45.6364	45.6364	4,776.737 7	2,028.845 1	6,805.582 8	4.4327	0.3757	7,028.365 6

## 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	2.6538					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	263.2279	5.1405	324.9263	0.5887		45.5578	45.5578		45.5578	45.5578	4,776.737 7	2,003.294 1	6,780.031 8	4.4081	0.3757	7,002.201 7
Landscaping	0.4265	0.1634	14.1843	7.5000e-004		0.0786	0.0786		0.0786	0.0786		25.5510	25.5510	0.0245		26.1639
<b>Total</b>	<b>272.9336</b>	<b>5.3040</b>	<b>339.1105</b>	<b>0.5894</b>		<b>45.6364</b>	<b>45.6364</b>		<b>45.6364</b>	<b>45.6364</b>	<b>4,776.737 7</b>	<b>2,028.845 1</b>	<b>6,805.582 8</b>	<b>4.4327</b>	<b>0.3757</b>	<b>7,028.365 6</b>

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6538					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	263.2279	5.1405	324.9263	0.5887		45.5578	45.5578		45.5578	45.5578	4,776.737 7	2,003.294 1	6,780.031 8	4.4081	0.3757	7,002.201 7
Landscaping	0.4265	0.1634	14.1843	7.5000e-004		0.0786	0.0786		0.0786	0.0786		25.5510	25.5510	0.0245		26.1639
<b>Total</b>	<b>272.9336</b>	<b>5.3040</b>	<b>339.1105</b>	<b>0.5894</b>		<b>45.6364</b>	<b>45.6364</b>		<b>45.6364</b>	<b>45.6364</b>	<b>4,776.737 7</b>	<b>2,028.845 1</b>	<b>6,805.582 8</b>	<b>4.4327</b>	<b>0.3757</b>	<b>7,028.365 6</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## Orchard View I and II Subdivision - Feather River AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Orchard View I and II Subdivision**  
**Feather River 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	2	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
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	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	7.73800E-002	5.34360E-001	6.71770E-001	1.10000E-003	3.16400E-002	3.16400E-002	0.00000E+000	9.44704E+001	9.44704E+001	6.23000E-003	0.00000E+000	9.46262E+001
Cranes	1.25880E-001	1.43595E+000	6.24680E-001	1.87000E-003	5.91300E-002	5.44000E-002	0.00000E+000	1.64118E+002	1.64118E+002	5.30800E-002	0.00000E+000	1.65445E+002
Excavators	1.83700E-002	1.80950E-001	2.45090E-001	3.90000E-004	8.76000E-003	8.06000E-003	0.00000E+000	3.40275E+001	3.40275E+001	1.10100E-002	0.00000E+000	3.43026E+001
Forklifts	1.32290E-001	1.21819E+000	1.28638E+000	1.70000E-003	8.28100E-002	7.61800E-002	0.00000E+000	1.49063E+002	1.49063E+002	4.82100E-002	0.00000E+000	1.50269E+002
Generator Sets	1.25780E-001	1.11372E+000	1.36159E+000	2.43000E-003	5.70400E-002	5.70400E-002	0.00000E+000	2.09127E+002	2.09127E+002	1.01800E-002	0.00000E+000	2.09381E+002
Graders	1.78400E-002	2.37210E-001	6.80400E-002	2.50000E-004	7.58000E-003	6.98000E-003	0.00000E+000	2.18649E+001	2.18649E+001	7.07000E-003	0.00000E+000	2.20417E+001
Pavers	1.44500E-002	1.54570E-001	1.59410E-001	2.60000E-004	7.51000E-003	6.91000E-003	0.00000E+000	2.27159E+001	2.27159E+001	7.35000E-003	0.00000E+000	2.28995E+001
Paving Equipment	1.14100E-002	1.17770E-001	1.39390E-001	2.20000E-004	5.89000E-003	5.42000E-003	0.00000E+000	1.96851E+001	1.96851E+001	6.37000E-003	0.00000E+000	1.98442E+001
Rollers	1.14500E-002	1.14460E-001	1.04140E-001	1.40000E-004	7.30000E-003	6.71000E-003	0.00000E+000	1.26767E+001	1.26767E+001	4.10000E-003	0.00000E+000	1.27792E+001
Rubber Tired Dozers	8.90600E-002	9.34910E-001	3.40860E-001	7.00000E-004	4.57900E-002	4.21200E-002	0.00000E+000	6.19206E+001	6.19206E+001	2.00300E-002	0.00000E+000	6.24212E+001
Scrapers	7.44700E-002	8.81410E-001	5.59390E-001	1.14000E-003	3.43800E-002	3.16300E-002	0.00000E+000	9.98140E+001	9.98140E+001	3.22800E-002	0.00000E+000	1.00621E+002
Tractors/Loaders/ Backhoes	1.96650E-001	1.99095E+000	2.49084E+000	3.44000E-003	1.13240E-001	1.04180E-001	0.00000E+000	3.02184E+002	3.02184E+002	9.77300E-002	0.00000E+000	3.04627E+002
Welders	1.05920E-001	5.47090E-001	6.31120E-001	9.50000E-004	2.49500E-002	2.49500E-002	0.00000E+000	6.96416E+001	6.96416E+001	8.59000E-003	0.00000E+000	6.98564E+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	7.73800E-002	5.34360E-001	6.71770E-001	1.10000E-003	3.16400E-002	3.16400E-002	0.00000E+000	9.44703E+001	9.44703E+001	6.23000E-003	0.00000E+000	9.46260E+001
Cranes	1.25880E-001	1.43595E+000	6.24680E-001	1.87000E-003	5.91300E-002	5.44000E-002	0.00000E+000	1.64118E+002	1.64118E+002	5.30800E-002	0.00000E+000	1.65445E+002
Excavators	1.83700E-002	1.80950E-001	2.45090E-001	3.90000E-004	8.76000E-003	8.06000E-003	0.00000E+000	3.40274E+001	3.40274E+001	1.10100E-002	0.00000E+000	3.43026E+001
Forklifts	1.32290E-001	1.21819E+000	1.28638E+000	1.70000E-003	8.28100E-002	7.61800E-002	0.00000E+000	1.49063E+002	1.49063E+002	4.82100E-002	0.00000E+000	1.50268E+002
Generator Sets	1.25780E-001	1.11372E+000	1.36159E+000	2.43000E-003	5.70400E-002	5.70400E-002	0.00000E+000	2.09127E+002	2.09127E+002	1.01800E-002	0.00000E+000	2.09381E+002
Graders	1.78400E-002	2.37210E-001	6.80400E-002	2.50000E-004	7.58000E-003	6.98000E-003	0.00000E+000	2.18649E+001	2.18649E+001	7.07000E-003	0.00000E+000	2.20417E+001
Pavers	1.44500E-002	1.54570E-001	1.59400E-001	2.60000E-004	7.51000E-003	6.91000E-003	0.00000E+000	2.27159E+001	2.27159E+001	7.35000E-003	0.00000E+000	2.28995E+001
Paving Equipment	1.14100E-002	1.17770E-001	1.39390E-001	2.20000E-004	5.89000E-003	5.42000E-003	0.00000E+000	1.96850E+001	1.96850E+001	6.37000E-003	0.00000E+000	1.98442E+001
Rollers	1.14500E-002	1.14460E-001	1.04140E-001	1.40000E-004	7.30000E-003	6.71000E-003	0.00000E+000	1.26767E+001	1.26767E+001	4.10000E-003	0.00000E+000	1.27792E+001
Rubber Tired Dozers	8.90600E-002	9.34910E-001	3.40860E-001	7.00000E-004	4.57900E-002	4.21200E-002	0.00000E+000	6.19205E+001	6.19205E+001	2.00300E-002	0.00000E+000	6.24212E+001
Scrapers	7.44700E-002	8.81400E-001	5.59390E-001	1.14000E-003	3.43800E-002	3.16300E-002	0.00000E+000	9.98139E+001	9.98139E+001	3.22800E-002	0.00000E+000	1.00621E+002
Tractors/Loaders/Backhoes	1.96650E-001	1.99095E+000	2.49084E+000	3.44000E-003	1.13240E-001	1.04180E-001	0.00000E+000	3.02183E+002	3.02183E+002	9.77300E-002	0.00000E+000	3.04627E+002
Welders	1.05920E-001	5.47090E-001	6.31120E-001	9.50000E-004	2.49500E-002	2.49500E-002	0.00000E+000	6.96416E+001	6.96416E+001	8.59000E-003	0.00000E+000	6.98563E+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	1.16439E-006	1.16439E-006	0.00000E+000	0.00000E+000	1.16247E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21864E-006	1.21864E-006	0.00000E+000	0.00000E+000	1.20886E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17552E-006	1.17552E-006	0.00000E+000	0.00000E+000	1.16609E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14045E-006	1.14045E-006	0.00000E+000	0.00000E+000	1.19785E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19545E-006	1.19545E-006	0.00000E+000	0.00000E+000	1.19399E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.14707E-007	9.14707E-007	0.00000E+000	0.00000E+000	1.36106E-006
Pavers	0.00000E+000	0.00000E+000	6.27313E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.80442E-007	8.80442E-007	0.00000E+000	0.00000E+000	8.73380E-007
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.52400E-006	1.52400E-006	0.00000E+000	0.00000E+000	1.00785E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.57770E-006	1.57770E-006	0.00000E+000	0.00000E+000	7.82523E-007
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13048E-006	1.13048E-006	0.00000E+000	0.00000E+000	1.12141E-006
Scrapers	0.00000E+000	1.13455E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20224E-006	1.20224E-006	0.00000E+000	0.00000E+000	1.19259E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19133E-006	1.19133E-006	0.00000E+000	0.00000E+000	1.18177E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14874E-006	1.14874E-006	0.00000E+000	0.00000E+000	1.14521E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)



No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.04	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	0.22	0.06	0.22	0.06	0.00	0.00
Grading	Fugitive Dust	0.25	0.13	0.25	0.13	0.00	0.00
Grading	Roads	0.01	0.00	0.01	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	0.27	0.15	0.27	0.15	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	0.74	0.84	1.52	1.68	1.77	1.76	0.00	1.71	1.71	0.76	0.00	1.71
Natural Gas	6.02	6.00	6.01	6.06	5.97	5.97	0.00	6.00	6.00	6.09	5.91	6.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
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			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
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	0.02			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	3.00			
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program	5.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.02		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

**Energy Mitigation Measures**

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

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

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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