

# ***Initial Study and Mitigated Negative Declaration for Tentative Tract Map 6192***

***June 2024***



Prepared By:



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Prepared For:



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## APPENDIX G/INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

**Environmental Checklist Form for:**  
**Vesting Tentative Tract Map No. 6192 and Planned Development Permit**  
**Application No. P23-03377**

1.	<b>Project title:</b> Environmental Assessment No. T-6192/P23-03377
2.	<b>Lead agency name and address:</b> City of Fresno Planning and Development Department 2600 Fresno Street Fresno, CA 93721
3.	<b>Contact person and phone number:</b> John George, Planner III City of Fresno Planning and Development Department (559) 621-8073
4.	<b>Project location:</b> The project site is located on the northeast corner of North Blythe Avenue and West Dayton Avenue within the City of Fresno. (APN: 511-031-42S)
5.	<b>Project sponsor's name and address:</b> DR Horton Contact Person: Matthew A Chavez 419 W Murray Avenue Visalia, CA 93291 (559) 378-1482
6.	<b>General &amp; Community plan land use designation:</b> General Plan: Medium Density Residential Community Plan: West Area Community Plan
7.	<b>Zoning:</b> RS-5/UGM (Single-Family Residential, Medium Density/Urban Growth Management Area)

8.

**Description of project:**

Vesting Tentative Tract Map No. 6192 and Planned Development Permit Application No. P23-03377 were filed by Precision Civil Engineering on behalf of DR Horton and pertains to an approximately 15.82-acre property located at the northeast corner of West Dayton and North Blythe Avenues (See Figure 2-1, Project Location Map). The applicant proposes to construct a 128-lot subdivision with a residential density of 8.1 DU/acre. The average lot size will be approximately 4,060 Square Feet ("sf"). Homes will be built with southern exposure for natural heating during the winter months with ample space for deciduous shade trees for natural cooling during the summer months. The Project will include interior streets with a Right of Way (ROW) 30' to provide access to every lot of the site. W. Dayton Avenue and N. Blythe Avenue will be improved to meet City Standards. An existing block wall and concrete pad onsite will be removed prior to construction. There are no existing trees or structures onsite that will need to be removed. There will be approximately 0.28 acres of open space located in the center of the property, which meets the minimum open space requirement (0.24 acres) in compliance with Fresno Municipal Code (FMC) Section 12-4.705(a)(ii). FMC 12-4.705(a)(ii) requires 0.001884 acres of open space per residential unit. The Project proposes 128 residential units, therefore requiring .24 acres of open space. See the open space area (labeled as Outlot A) in Figure 3-1, Tentative Tract Map.

Planned Development Permit Application No. P23-03377 requests authorization to modify development standards of the RS-5 zone district. The request includes a reduction in minimum lot size (from 4,000 sf to 2,500 sf), reduction in minimum front yard setback (from 13 feet to 5 feet), reduction in minimum street side yard setback (10 feet to 5 feet), reduction in minimum rear yard setback (10 feet to 5 feet), reduction in minimum garage to primary living façade setback (4 feet to 0 feet), increase in maximum lot coverage (from 60 percent to 80 percent), and reduction in the local street width standard (from between 42 and 60 feet to 30 feet).

There will be one access driveway in and out of the development on W Dayton Avenue with an entry gate. An emergency fire gate will connect to N Blythe Ave. El Capitan Ave will provide access from the south to the north of the site. All internal streets will contain sidewalks on both sides.

The Project will result in onsite and offsite infrastructure improvements, including new and relocated utilities. New infrastructure (i.e., sewer, water, storm drain, curb, gutter, streetlights, sidewalks, and permanent pavement) will be designed and constructed in conformance with the City of Fresno Standards.

9.	<p><b>Surrounding land uses and setting:</b></p> <table border="1"> <thead> <tr> <th></th> <th>Planned Land Use</th> <th>Existing Zoning</th> <th>Existing Land Use</th> </tr> </thead> <tbody> <tr> <td><b>North</b></td> <td>Medium Density Residential</td> <td>Fresno County AL20 (<i>Limited Agriculture</i>)</td> <td>Rural Residential</td> </tr> <tr> <td><b>East</b></td> <td>Medium Density Residential</td> <td>Residential Single-Family, Medium Density</td> <td>Medium Density Residential</td> </tr> <tr> <td><b>South</b></td> <td>Medium Density Residential</td> <td>Residential Single-Family, Medium Density</td> <td>Medium Density Residential</td> </tr> <tr> <td><b>West</b></td> <td>Medium Low-Density Residential</td> <td>Fresno County AL20 (<i>Limited Agriculture</i>)</td> <td>Rural Residential</td> </tr> </tbody> </table>		Planned Land Use	Existing Zoning	Existing Land Use	<b>North</b>	Medium Density Residential	Fresno County AL20 ( <i>Limited Agriculture</i> )	Rural Residential	<b>East</b>	Medium Density Residential	Residential Single-Family, Medium Density	Medium Density Residential	<b>South</b>	Medium Density Residential	Residential Single-Family, Medium Density	Medium Density Residential	<b>West</b>	Medium Low-Density Residential	Fresno County AL20 ( <i>Limited Agriculture</i> )	Rural Residential
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<b>West</b>	Medium Low-Density Residential	Fresno County AL20 ( <i>Limited Agriculture</i> )	Rural Residential																		
10.	<p><b>Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):</b></p> <ul style="list-style-type: none"> <li>San Joaquin Valley Air Pollution Control District</li> </ul>																				
11.	<p><b>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, has consultation begun?</b></p> <p>The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits.</p>																				

	<p>Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts on tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.</p> <p>Currently, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe have requested to be notified pursuant to Assembly Bill 52 (AB 52). A certified letter was mailed to the above-mentioned tribes on March 8, 2022. The 30-day comment period ended on April 8, 2022. Neither tribe requested consultation.</p>
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## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

<u>    </u>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<u>  X  </u>	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 project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<u>    </u>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
<u>    </u>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact 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 EIR is required, but it must analyze only the effects that remain to be addressed.
<u>    </u>	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 or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
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Rob Holt, Supervising Planner

06/27/2024

Date

EVALUATION OF ADDITIONAL ENVIRONMENTAL IMPACTS NOT ASSESSED IN PROGRAM ENVIRONMENTAL IMPACT REPORT SCH NO. 2019050005 PREPARED FOR THE APPROVED FRESNO GENERAL PLAN (GP PEIR):

Note to preparer: For projects that are consistent with the Fresno General Plan and Zoning (or where the zoning will be changed only for the purposes of achieving consistency with the General Plan), tiering pursuant to CEQA Guidelines Section 15152 may be used. If tiering will be used, please comply with the requirements of Section 15152(g).

For projects that are not completely consistent with the Fresno General Plan and Zoning (i.e. projects that include a General Plan Amendment and/or Rezone), the provisions of CEQA Guidelines Section 15152 do not apply. However, the GP PEIR and its analysis may still be incorporated by reference to provide a basis for the project's initial study, to address regional influences, secondary effects, cumulative impacts, and broad alternatives pursuant to CEQA Guidelines 15168(d).

1. For purposes of this Initial Study, the following answers have the corresponding meanings:
  - a) "No Impact" means the specific impact category does not apply to the project, or that the record sufficiently demonstrates that project specific factors or general standards applicable to the project will result in no impact for the threshold under consideration.
  - b) "Less Than Significant Impact" means there is an impact related to the threshold under consideration, but that impact is less than significant.
  - c) "Less Than Significant with Mitigation Incorporation" means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the project, the impact is less than significant. For purposes of this Initial Study "mitigation incorporated into the project" means mitigation originally described in the GP PEIR and applied to an individual project, as well as mitigation developed specifically



for an individual project.

- d) "Potentially Significant Impact" means there is substantial evidence that an effect may be significant related to the threshold under consideration.
2. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
3. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
4. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
5. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from, "Earlier Analyses," as described in (6) below, may be cross-referenced).
6. Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the PEIR or another earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

- c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 7. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 9. The explanation of each issue should identify:
  - a) The significance criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS</b> – Except as provided in PRC Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality 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?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

## DISCUSSION

### a) Have a substantial adverse effect on a scenic vista?

**No Impact:** A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The proposed project is currently a vacant lot with minimal vegetation. The site is surrounded by single-family housing developments to the east and south, and rural residential to the west and north. There are no significant trees, rock outcroppings, and/or historical buildings located on the subject property that have been identified as important scenic resources. The San Joaquin River and the Sierra Nevada Mountains are the primary

scenic vista within this region. The San Joaquin River is approximately 6 miles north of the project site and the Sierra Nevada foothills are approximately 21 miles east of the project site. The San Joaquin River and the Sierra Nevada mountains are not visible from the project site due to the extensive urban development between the project site and these features. There is *no impact*.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact:** The PEIR states that scenic resources within the City of Fresno include parks, golf courses, areas along the San Joaquin River, and historic structures in Downtown Fresno. None of these exist within the vicinity of the project site.

The California Department of Transportation's State Scenic Highways map indicates that Fresno County has one officially designated State Scenic Highway along State Route (SR-) 180. The project site is located about 24 miles from the start of this scenic section of SR-180. Additionally, SR-168, which is east of the project site, is eligible for State Scenic Highway status. The project site is roughly 7 miles from the beginning of SR-168's scenic eligible section. The proposed project will not harm any scenic resources within a state scenic highway, resulting in *no impact*.

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

**No Impact:** The project site is located in an urbanized area within the City of Fresno. The project site is mostly flat and is on previously disturbed land. The site currently has little visual character. The materials, signage, fencing, landscaping, and building materials used in the construction of the Project will be selected based on their ability to improve the overall visual character of the area.

The RS-5 district contains regulations regarding the visual character:

- Facades, including building materials, finishes, and windows shall be similar to adjacent homes.
- Fencing over 3 feet in height in front yards must be open a minimum of 80 percent.
- All utilities shall be installed underground.
- A minimum of two trees per lot are required.
- Signage shall be no larger than 32 square feet, with a maximum of two signs per entrance from a public street.

The proposed project will comply with all applicable zoning and other regulations governing scenic quality. This includes the following:

- The homes will be similar in scale and character to the surrounding homes.
- The houses will all be built with similar materials and share a similar style.
- Windows of all homes will be of similar location and sizes.
- No homes will have fencing in the front yard. For lots where the street side yard faces the front yard of another lot, a minimum landscape easement of five feet will be placed in front of the masonry wall.
- All utilities will be installed underground, following City standards.
- Two trees will be planted per lot, with one oriented to the street.
- No signage is proposed at this time, if added, it will be comply with the regulations and be smaller than 32 square feet.

There is *no impact*.

**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Less than Significant with Mitigation:** The Project would result in new lighting sources on the project site consistent with adjacent residential development. New lighting sources would include interior lighting from residences, street lighting, and security lighting. All street and landscape lighting will be consistent with the City's lighting standards, which are developed to minimize impacts related to excessive light and glare. The Project will implement mitigation measures (MM) AES-4.1 through AES-4.5 (listed below), These mitigation measures establish guidelines for outdoor lighting systems and building materials.

The planned Project may produce temporary light and glare from construction activities, potentially impacting views during both day and night. This could stem from the lights on construction vehicles and equipment. However, most construction work is expected to take place during daylight hours, and the lighting will be directed away from surrounding homes to minimize disruption. The light and glare will cease once the Project construction is finished.

With the implementation of Mitigation Measures AES-4.1 through AES-4.5, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the surrounding urban area, and impacts will be *less than significant with mitigation*.

**Mitigation Measures**

The proposed project shall implement and incorporate, as applicable, the aesthetic-related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 2024.

- **Mitigation Measure AES-4.1:** Lighting for Street and Parking Areas. Lighting systems for street and parking areas shall include shields to direct light to the roadway surfaces and parking areas. Vertical shields on the light fixtures shall also be used to direct light away from adjacent light sensitive land uses such as residences.
- **Mitigation Measure AES-4.2:** Lighting for Public Facilities. Lighting systems for public facilities such as active play areas shall provide adequate illumination for the activity; however, low intensity light fixtures and shields shall be used to minimize spillover light onto adjacent properties.
- **Mitigation Measure AES-4.3:** Lighting for Non-Residential Uses. Lighting systems for non-residential uses, not including public facilities, shall provide shields on the light fixtures and orient the lighting system away from adjacent properties. Low intensity light fixtures shall also be used if excessive spillover light onto adjacent properties will occur.
- **Mitigation Measure AES-4.4:** Signage Lighting. Lighting systems for freestanding signs shall not exceed 100 foot-Lamberts (FT-L) when adjacent to streets which have an average light intensity of less than 2.0 horizontal footcandles and shall not exceed 500 FT-L when adjacent to streets which have an average light intensity of 2.0 horizontal footcandles or greater.
- **Mitigation Measure AES-4.5:** Use of Non-Reflective Materials. Materials used on building facades shall be non-reflective.

**II. AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

## DISCUSSION

- 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?**

**No Impact:** The Project is located within the designation of Farmland of Local Importance of the Farmland Mapping and Monitoring Program. The Project does not involve construction on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Farmland Mapping and Monitoring Program. There is no agricultural activity within the project vicinity. The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and therefore there is *no impact*.

- b) **Conflict with existing zoning for agricultural use or a Williamson Act contract?**

**No Impact:** The project site is not zoned for agricultural use and is not under a Williamson Act Contract and therefore there is *no impact*.

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

**No Impact:** The project site is zoned for single-family residential uses as identified in the Project Description above and in Impact XI (Land Use and Planning) below, thus the project site is not zoned for forest or timberland production and there is no proposed zone change for the project site and therefore there is *no impact*.

- d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact:** No conversion of forestland, as defined under the Public Resource Code, will occur due to the Project because the site is currently vacant and not forested. Therefore, there is *no impact*.

- e) **Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?**

**No Impact:** As discussed above, there is no agricultural activity within the project vicinity. The Project does not include any features which could result in the conversion



of Farmland to non-agricultural use or the conversion of forestland to non-forest use and therefore there is *no impact*.

In conclusion, the Project will not result in any impacts to agricultural or forest resources beyond those analyzed in the City of Fresno General Plan PEIR.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY</b> – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan (e.g., by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?				X
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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

## DISCUSSION

### a) Conflict with or obstruct implementation of the applicable air quality plan?

**No Impact:** The Project site is located within the San Joaquin Valley Air Basin (SJVAB), which is regulated by the San Joaquin Valley Air Pollution Control District (SJVAPCD). This region has had chronic non-attainment of federal and State clean

air standards for ozone/oxidants and particulate matter due to a combination of topography and climate. The Project is located within the boundaries of the SJVAPCD and would result in air pollutant emissions that are regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in Fresno County into compliance with federal and state air quality standards. The SJVAPCD has particulate matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plan for the basin.

Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards. The SJVAPCD adopted the Indirect Source Review (ISR) Rule in order to fulfill the SJVAPCD's emission reduction commitments in its PM<sub>10</sub> and NO<sub>x</sub> attainment plans and has since determined that implementation and compliance with ISR would reduce the cumulative PM<sub>10</sub> and NO<sub>x</sub> impacts anticipated in the air quality plans to a less than significant level.

#### *Consistency With Air Quality Plans (AQP)*

A project is consistent with air quality plans if it will not result in an increase in existing air quality violations, cause new violations, or delay the timely attainment of air quality standards. Individual projects are generally not large enough to contribute to an existing air quality violation.

To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has multiple air quality attainment plan (AQAP) documents, including:

- 2022 Ozone Plan
- 2007 PM<sub>10</sub> Maintenance Plan and Request for Redesignation
- 2023 PM<sub>2.5</sub> Plan

As discussed below under Question B, emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> associated with the construction and operation of the Project would not exceed the District's significance thresholds. Therefore, the project would not contribute to air quality violations. Additionally, as discussed in Question B, the emissions from the construction and operation of the Project will not delay the timely attainment of air quality standards.

#### *Compliance with Applicable Control Measures*

The AQPs contain regulations that apply to this project. These are listed below:

- SJVAPCD Rule 9510 – Indirect Source Review (ISR). This rule reduces the impact PM<sub>10</sub> and NO<sub>x</sub> emissions from growth have on the SJVAB. This rule places emission reduction requirements on applicable development projects in order to reduce emissions through onsite mitigation, offsite SJVAPCD administered projects, or a combination of the two. This project will submit an Air Impact Assessment (AIA) application to SJVAPCD in accordance with Rule 9510's requirements.

- Regulation VIII - Fugitive PM<sub>10</sub> Prohibitions. Regulation VIII is composed of eight rules which together aim to limit PM<sub>10</sub> emissions by reducing fugitive dust. These rules contain required management practices to limit PM<sub>10</sub> emissions during construction, demolition, excavation, extraction, and/or other earth moving activities.
- Rule 3135: Dust Control Plan and Fee. All projects which include construction, demolition, excavation, extraction, and/or other earth moving activities as defined by Regulation VIII (described above) are required to submit a Dust Control Plan and required fees to mitigate impacts related to dust.
- Rule 4101: Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color and/or have the potential to obstruct visibility.

The project will comply with all of the applicable SJVAPCD rules and regulations and not contribute to air quality violations or delay the timely attainment of air quality standards. Thus, the project will not conflict with the air quality attainment plans (2022 Ozone Plan, 2007 PM<sub>10</sub> Maintenance Plan, 2023 PM<sub>2.5</sub> Plan). Therefore, there is *no impact*.

**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?**

**Less Than Significant Impact:** The SJVAPCD is responsible for enforcing air quality standards in the project area. To meet state and federal air quality objectives, the SJVAPCD adopted the following thresholds of significance for projects:

Pollutant / Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
<b>CO</b>	100	100	100
<b>NO<sub>x</sub></b>	10	10	10
<b>ROG</b>	10	10	10
<b>SO<sub>x</sub></b>	27	27	27
<b>PM<sub>10</sub></b>	15	15	15
<b>PM<sub>2.5</sub></b>	15	15	15

**Table 3-1: SJVAPCD Thresholds of Significance for Criteria Pollutants (Source: SJVAPCD)**

**Construction Phase:** Project construction would generate pollutant emissions from the following construction activities: site preparation, grading, building construction, application of architectural coatings, and paving. Construction emissions were calculated using the California Emission Estimator Model (CalEEMod). The construction will produce Carbon Monoxide (CO), Reactive Organic Gasses (ROG),

Sulfur Dioxide (SO<sub>x</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Respirable Particulate Matter (PM<sub>10</sub>), and Fine Particulate Matter (PM<sub>2.5</sub>). However, as shown below in Table 3-2, the calculated projected emissions are significantly lower than the SJVAPCD thresholds.

	CO (tons/yr)	ROG (tons/yr)	SO <sub>x</sub> (tons/yr)*	NO <sub>x</sub> (tons/yr)	PM <sub>10</sub> (tons/yr)	PM <sub>2.5</sub> (tons/yr)
<b>Emissions Generated from Overall Construction</b>	<b>1.9441</b>	<b>2.2764</b>	<b>.00384</b>	<b>1.7824</b>	<b>0.3542</b>	<b>0.1882</b>
<b>SJVAPCD Air Quality Thresholds of Significance</b>	<b>100</b>	<b>10</b>	<b>27</b>	<b>10</b>	<b>15</b>	<b>15</b>

\*Threshold established by SJVAPCD for SO<sub>x</sub>, however emissions are reported as SO<sub>2</sub> by CalEEMod.

**Table 3-2:** Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants Related to Construction. Source: SJVAPCD, CalEEMod

**Operational Phase.** Implementation of the Project would result in long-term emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. Operational emissions from these factors were calculated using CalEEMod. The full CalEEMod Report can be found in Appendix C. As shown in Table 3-3 below, the project's operational emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tons/year)	ROG (tons/yr)	SO <sub>x</sub> (tons/yr)*	NO <sub>x</sub> (tons/yr)	PM <sub>10</sub> (tons/yr)	PM <sub>2.5</sub> (tons/yr)
<b>Overall Operational Emissions</b>	<b>5.1663</b>	<b>1.5091</b>	<b>0.0130</b>	<b>0.8459</b>	<b>1.3179</b>	<b>0.3723</b>
<b>SJVAPCD Air Quality Thresholds of Significance</b>	<b>100</b>	<b>10</b>	<b>27</b>	<b>10</b>	<b>15</b>	<b>15</b>

\*Threshold established by SJVAPCD for SO<sub>x</sub>, however emissions are reported as SO<sub>2</sub> by CalEEMod.

**Table 3-3:** Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants Related to Operations. Source: SJVAPCD, CalEEMod

The SJVAPCD is responsible for bringing air quality in Fresno County into compliance with federal and state air quality standards. The significance thresholds and rules developed by the SJVAPCD are designed to prevent projects from violating air quality standards or significantly contributing to existing air quality violations. As discussed above, neither construction-related emissions nor operation-related emissions will exceed thresholds established by the SJVAPCD. The Project will comply with all applicable SJVAPCD rules and regulations, which will further reduce the potential for any significant impacts related to air quality as a result of project implementation. Because these thresholds and regulations are designed to achieve and/or maintain federal and state air quality standards, and the Project is compliant with these

thresholds and regulations, the Project will not violate an air quality standard or significantly contribute to an existing air quality violation and therefore the impact is *less than significant*.

**c) Expose sensitive receptors to substantial pollutant concentrations?**

**Less than Significant Impact:** The single-family residences located directly north, south, east, and west of the project site are the closest sensitive receptors. The Project does not include any project components identified by the California Air Resources Board that could potentially impact any sensitive receptors. These include heavily traveled roads, distribution centers, fueling stations, and dry-cleaning operations. The Project would not expose sensitive receptors to substantial pollutant concentrations and therefore the impact is *less than significant*.

**d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**Less Than Significant Impact:** The Project will create temporary localized odors from vehicle exhaust, chemicals, garbage, or other waste during project construction. The Project will not introduce a conflicting land use (surrounding land includes residential neighborhoods) to the area and will not have any component that would typically emit odors. The Project would not create objectionable odors affecting a substantial number of people and therefore the impact is *less than significant*.

In conclusion, the proposed project would not result in any potentially significant impacts related to air quality, and no mitigation is required

<b>ENVIRONMENTAL ISSUES</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>IV. BIOLOGICAL RESOURCES</b> – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

### Environmental Setting:

The project site is in an urban environment on the northwest side of the City of Fresno. It is surrounded by housing. Single family developments exist to the east and south, while rural residential homes exist to the north, west, and southwest. The topography of the site is relatively flat with an elevation range of approximately 280 to 300 feet above sea level (msl). There is one (1) depression, approximately 100 feet in diameter, located in the southwest corner of the project site. There is (1) nonnative eucalyptus tree located at the bottom of the depression. The project site was previously graded at an unknown date and is currently vacant. Existing vegetation consist of one (1) eucalyptus tree, no shrubs, ruderal grasses, and invasive weeds. It is unlikely that existing vegetation would create a suitable nesting habitat for most special status bird species. In addition, no drainages appear to be connected to the project site. Since the project site was previously disturbed, a biological study was not required by the city of Fresno.

### DISCUSSION

- 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 the U.S. Fish and Wildlife Service?**

**Less than Significant with Mitigation Incorporation:** The project site was previously disturbed and is currently vacant with one nonnative eucalyptus tree and no shrubs that would likely provide potential habitat for special status species. It is unlikely that any special-status species identified in local or regional plans, policies or regulations, or by the California Department of Fish & Game or U.S. Fish and Wildlife



Service occur in the project site due to the lack of suitable habitat. However, there is potential for special status species on the site. Mitigation Measures BIO-1.1-1.4 will reduce the Project impacts to biological resources. Therefore, the project will have a *less than significant impact with mitigation incorporated*.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?**

**Less than Significant with Mitigation Incorporated:** The project site is not a suitable area for any riparian habitats or other sensitive natural communities, nor would they be impacted by the activities associated with the construction and operation of the Project. The National Wetlands Inventory indicates that a Freshwater Emergent Wetland is situated roughly 400 feet to the south of the site. The closest pond is around 1 mile northeast of this location. Additionally, there is an underground river near the project site, which surfaces approximately 0.2 miles south of the site. However, a pre-construction survey will be utilized from Mitigation Measures BIO-2.1-2.3 to mitigate any potential impacts to habitats. Therefore, there is a *less than significant impact with mitigation incorporated*.

- 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?**

**No Impact:** The project site does not contain any state or federal wetlands and no wetlands would be impacted by any activities associated with implementation of the Project and therefore there is *no impact*.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**No Impact:** The site is bordered by urban development and other disturbed vacant land that is not a reasonable habitat for wildlife. However, the project has the potential to support important movement corridors for native wildlife. According to the California Natural Diversity Database (CNNDDB), the project site has the potential to host 27 native species of animals, and six of them are either threatened or endangered species. Of these 27 species, two are amphibians and one is a crustacean. These species would not exist or migrate through the site as there is no water on the site. Nine of the species are birds, which will be able to migrate through the site the same as before development. Five of the species are insects, which do not migrate far and can live in semi-natural landscapes. Five of the species are mammals, however none of the species are migratory. There are five reptile species, and of the reptile species,

the Western Pond Turtle is the only migratory species. However, with no water on the project site, it is highly unlikely that the Western Pond Turtle will use this site to migrate. Due to the project site being previously disturbed, there is no habitat present for native plants to thrive.

The CNNDDB states that the project site has limited connectivity opportunity. Wildlife movement corridors are typically valleys, rivers, creeks, or ridgelines. The project site does not contain any of these features. Therefore, the project site would not interfere with the movement of any native or migratory fish or wildlife species, migratory wildlife corridors or impede the use of native wildlife nursery sites and therefore there is *no impact*.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact:** The project site has one (1) nonnative eucalyptus tree. However, eucalyptus trees can be removed without approval of a Tree Removal Permit per the City of Fresno Municipal Code Section 15-2308-C-3-e. Because no other trees exist on the project site, the Project will not conflict with any local policies or ordinances protecting biological resources and therefore there is *no impact*.

**f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact:** The PG&E San Joaquin Valley Operation and Maintenance Habitat Conservation Plan was approved in 2007 and covers portions of nine counties, including Fresno County and the city of Fresno. This HCP covers PG&E activities which occur as a result of ongoing operation and maintenance (O&M) that would have an adverse impact on any species covered by the HCP. The HCP also provides incidental take coverage from the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW).

Outside of this, there are no known Habitat Conservation Plans or Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that pertain to the project site and therefore development within the project site would not result in any impacts to an adopted HCP or NCCP. There is *no impact*.

***Mitigation Measures:***

The proposed project shall implement and incorporate the biological resources related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 2024.

- **Mitigation Measure BIO-1.1:** Construction of a proposed project shall avoid, where possible, vegetation communities that provide suitable habitat for a special-status species known to occur within the Planning Area. If construction within potentially suitable habitat must occur, the presence/absence of any special-status plant or wildlife species must be determined prior to construction, to determine if the habitat supports any special-status species. If a special-status species are determined to occupy any portion of a project site, avoidance and minimization measures shall be incorporated into the construction phase of a project to avoid direct or incidental take of a listed species to the greatest extent feasible.
- **Mitigation Measure BIO-1.2:** Direct or incidental take of any state or federally listed species shall be avoided to the greatest extent feasible. If construction of a proposed project will result in the direct or incidental take of a listed species, consultation with the resources agencies and/or additional permitting may be required. Agency consultation through the CDFW 2081 and USFWS Section 7 or Section 10 permitting processes shall take place prior to any action that may result in the direct or incidental take of a listed species. Specific mitigation measures for direct or incidental impacts to a listed species will be determined on a case-by-case basis through agency consultation.
- **Mitigation Measure BIO-1.3:** Development within the Planning Area shall avoid, where possible, special-status natural communities and vegetation communities that provide suitable habitat for special-status species. If a proposed project will result in the loss of a special-status natural community or suitable habitat for special-status species, compensatory habitat-based mitigation is required under CEQA and CESA. Mitigation shall consist of preserving on-site habitat, restoring similar habitat or purchasing off-site credits from an approved mitigation bank. Compensatory mitigation shall be determined through consultation with the City and/or resource agencies. An appropriate mitigation strategy and ratio shall be agreed upon by the developer and lead agency to reduce project impacts to special-status natural communities to a less than significant level. Agreed-upon mitigation ratios shall depend on the quality of the habitat and presence/absence of a special-status species. The specific mitigation for project level impacts shall be determined on a case-by-case basis.
- **Mitigation Measure BIO-1.4:** Proposed projects within the Planning Area should avoid, if possible, construction within the general nesting season of February through August for avian species protected under Fish and Game Code 3500 and the Migratory Bird Treaty Act (MBTA), if it is determined that suitable nesting habitat occurs on a project site. If construction cannot avoid the nesting season, a pre-construction clearance survey shall be conducted by a qualified biologist to determine if any nesting birds or nesting activity is observed on or within 500-feet of a project site. If an active nest is observed during the survey, a biological monitor

shall be on site to ensure that no proposed project activities would impact the active nest. A suitable buffer shall be established around the active nest until the nestlings have fledged and the nest is no longer active. Project activities may continue in the vicinity of the nest only at the discretion of the biological monitor. Prior to commencement of grading activities and issuance of any building permits, the Director of the City of Fresno Planning and Development Department, or designee, shall verify that all proposed project grading and construction plans include specific documentation regarding the requirements of the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3503, that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field.

- **Mitigation Measure BIO-2.1:** A pre-construction clearance survey shall be conducted by a qualified biologist to determine if a proposed project will result in the removal or impact to any riparian habitat and/or a special-status natural community with potential to occur in the Planning Area, compensatory habitat-based mitigation shall be required to reduce project impacts. Compensatory mitigation must involve the preservation or restoration or the purchase of off-site mitigation credits for impacts to riparian habitat and/or a special-status natural community. Mitigation must be conducted in-kind or within an approved mitigation bank in the region. The specific mitigation ratio for habitat-based mitigation shall be determined through consultation with the appropriate agency (i.e., CDFW or USFWS) on a case-by-case basis. The project applicant/developer for a proposed project shall develop and implement appropriate mitigation regarding impacts on their respective jurisdictions.
- **Mitigation Measure BIO-2.2:** A pre-construction clearance survey shall be conducted by a qualified biologist to determine if a proposed project will result in significant impacts to streambeds or waterways protected under Section 1600 of Fish and Wildlife Code and Section 404 of the CWA. The project applicant/developer for a proposed project shall consult with partner agencies such as CDFW and/or USACE to develop and implement appropriate mitigation regarding impacts on their respective jurisdictions, determination of mitigation strategy, and regulatory permitting to reduce impacts, as required for projects that remove riparian habitat and/or alter a streambed or waterway. The project applicant/developer shall implement mitigation as directed by the agency with jurisdiction over the particular impact identified.
- **Mitigation Measure BIO-2.3:** Prior to project approval, a pre-construction clearance survey shall be conducted by a qualified biologist to determine if a proposed project will result in project-related impacts to riparian habitat or a special-status natural community or if it may result in direct or incidental impacts to special-status species associated with riparian or wetland habitats. The project applicant/developer for a proposed project shall be obligated to address project-

specific impacts to special-status species associated with riparian habitat through agency consultation, development of a mitigation strategy, and/or issuing incidental take permits for the specific special-status species, as determined by the CDFW and/or USFWS.

*Note: The practice of requiring pre-construction surveys as mitigation measures, rather than performing them during the environmental analysis stage, is typically accepted under CEQA regulations for several reasons:*

- 1. Timing and Practicality: Pre-construction surveys are often more accurate and effective when conducted closer to the start of construction activities. This timing ensures that the most current and relevant data about the presence of species or habitats are used in planning and mitigation efforts.*
- 2. Adaptive Management: Requiring surveys as a condition of approval allows for adaptive management. This means that mitigation measures can be tailored to the actual conditions found at the time of construction, which might differ from those identified during the initial environmental analysis.*
- 3. Case Law and Precedent: Several court decisions have upheld the deferral of specific surveys to the pre-construction phase as long as the mitigation measures clearly outline the steps to be taken if impacts are identified. The key requirement is that the MND provides a framework and commitment to conduct these surveys and implement appropriate mitigation measures based on their findings.*
  - a. Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 37*
  - b. Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296*
  - c. Riverwatch v. County of San Diego (1999) 76 Cal.App.4<sup>th</sup> 1428*
  - d. Defend the Bay v. City of Irvine (2004) 119 Cal.App.4<sup>th</sup> 1261*

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES</b> – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

## DISCUSSION

### a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

**Less Than Significant Impact with Mitigation:** A historical resource, as defined by CEQA, includes one or more of the following criteria: (1) the resource is listed, or found eligible in, the California Register of Historical Resources; (2) listed in a local register of historical resources as defined by Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by the project's lead agency. (PRC Section 21084.1; State CEQA Guidelines Section 15064.5(a).) Under CEQA, historical resources include built environmental resources and archaeological sites.

The Southern San Joaquin Valley Archaeological Information Center conducted a Cultural Resources Records Search on February 21, 2022, to determine if any historical, archaeological, or cultural resources have previously been recorded in or within the one-half mile radius of the project area. The Cultural Resources Record Search is included as Appendix C. The results indicate that there have been no previous cultural resource studies in the project area; however, there have been four (4) studies conducted within the one-half mile radius. There are no recorded resources within the project area. There is one (1) recorded resource within the one-half mile

radius, P-10-005392, which is an unknown historic property resource. The project will not impact any properties outside of the project site, and this resource will remain unaffected. There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

The project area has experienced extensive prior disturbances leading to the conclusion that the likelihood of finding cultural resources was low. Therefore, no further visual inspection was deemed necessary. In the event historical resources are found at the project site, construction will halt, and a qualified historical resources specialist will be contacted and will make recommendations to the City. Implementation of the City of Fresno PEIR Mitigation Measure CUL-1 will result in a *less than significant impact with mitigation implemented*.

**b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**Less Than Significant Impact with Mitigation:** According to the State CEQA Guidelines, “When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource.” (State CEQA Guidelines Section 15064.5(c)(1)). Those archeological sites that do not qualify as historical resources shall be assessed to determine if these qualify as “unique archaeological resources” (PRC Section 21083.2).

There are no known archaeological resources located within the project site. The implementation of Mitigation Measures CUL-1.1 and CUL-3 (listed below from the General Plan PEIR) will ensure that potential impact to unknown archeological resources will be *less than significant with mitigation incorporated*.

**c) Disturb any human remains, including those interred outside of formal cemeteries?**

**Less Than Significant Impact with Mitigation:** There are no known human remains buried in the project vicinity. If human remains are unearthed during project construction, there is a potential for a significant impact. Therefore, the implementation of MM CUL-3 (listed below from the General Plan PEIR) will ensure that impacts will be *less than significant with mitigation incorporated*.

**Mitigation Measures**

The proposed project shall implement and incorporate the cultural resource related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 2024.

- Mitigation Measure CUL-1:** If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.
- Mitigation Measure CUL-3:** In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

In conclusion, the Project will not result in any cultural resource impacts beyond those analyzed in the City of Fresno General Plan PEIR.



ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VI. ENERGY</b> – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

### Environmental Setting:

Pacific Gas and Electric (PG&E) provides electricity services within the City of Fresno. PG&E serves approximately 16 million people throughout a 70,000 square mile service area in northern and central California. PG&E supplies electricity to its customers through a variety of renewable and non-renewable sources.

### DISCUSSION

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Less Than Significant Impact:** The Project includes the construction and operation of 128 single-family residential homes. The construction is expected to take 19 months. During construction, vehicle fuel consumption was estimated based on the assumed construction schedule, vehicle trip lengths, and the number of workers per construction phase as provided by CalEEMod, and Year 2022 gasoline/diesel miles per gallon (MPG) factors provided by the Emission Factor (EMFAC) 2022. To simplify the estimation process, it was assumed that all worker vehicles used gasoline as a fuel source and all vendor vehicles used diesel as a fuel source. Table 6-1, below, provides gasoline and diesel fuel used estimates by on-road sources during each phase of construction.

During the construction phase, there will be an increase in energy consumption related to employee travel to and from the project site and the operation of construction

equipment. However, this increase in energy consumption is temporary and will cease once the construction is completed. In addition, energy consumption will be minimized with best management practices (BMP) in compliance with local, state, and federal regulations.

The first phase is the site preparation, which will take about 10 days and use an estimated 1,950 gallons of gasoline from worker commuting, dozers, and tractors/loaders/backhoes. The second phase is grading, which will take about 30 days and use an estimated 9,238 gallons of gasoline from worker commuting, graders, excavators, dozers, scrapers, and tractors/loaders/backhoes. The third phase is building construction, which will take about 300 days and use an estimated 44,107 gallons of gasoline and 3,637 gallons of diesel from worker commuting, cranes, forklifts, generators, welders, and tractors/loaders/backhoes. The fourth phase is paving, which will take about 20 days and use an estimated 2,356 gallons of gasoline from worker commuting, pavers, paving equipment, and rollers. The final phase is the architectural coating, which will take about 20 days and use an estimated 324 gallons of gasoline from worker commuting and air compressors. The Project would comply with the SJVAPCD requirements regarding the use of fuel-efficient vehicles.

**Table 6-1: Fuel Use Generated by Construction Activities.**

Construction Phase	# of Days	Worker Trip Number <sup>1</sup>	Vendor Trip Number <sup>1</sup>	Gasoline Fuel Use (gallons) <sup>2</sup>	Diesel Fuel Use (gallons) <sup>2</sup>
Site Preparation	10	18	0	1,950	0
Grading	30	20	0	9,238	0
Building Construction	300	46	14	44,107	3,637
Paving	20	15	0	2,356	0
Architectural Coating	20	9	0	324	0
<b>Total</b>	<b>380</b>	<b>108</b>	<b>14</b>	<b>57,974</b>	<b>3,637</b>
<ul style="list-style-type: none"> <li>• Data provided by CalEEMod (Appendix C)</li> <li>• Data provided by EMFAC (Appendix D)</li> </ul>					

Source: CalEEMod (v. 2020.4.0); EMFAC2017

During the operational phase, the Project is anticipated to achieve zero net energy (ZNE) consumption, where the annual consumed energy is less than or equal to the on-site renewable generated energy per the *California New Residential Zero Net Energy Action Plan 2015-2020*. This plan is enforced by the California Public Utilities Commission, Energy Efficiency Branch and is implemented through Title 24, Part 6 of the California Building Code, which requires developers to include energy efficiency measures (i.e., solar panels on all new residential buildings) to achieve the required building efficiency standards. Projected energy usage during the operational phase will be approximately 3,076,810 kilo-British Thermal Unit (kBtu)/year for natural gas

and 1,020,670-kilowatt hour (kWh)/year for electricity. Fuel usage will be approximately 134,951 gallons (gal) for gasoline and 16,070 gal for diesel. See Table 6-2, below. In addition, the Project is not anticipated to result in wasteful fuel consumption due to operational vehicles. The projected average MPG is 24.69 for vehicle class passenger cars (LDV), light-duty trucks (LDT1 and LDT2), and medium-duty trucks (MDV) shows that there will not be wasted or inefficient fuel use. According to the US Department of Transportation, the average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020. The improvement in MPGs can be attributed to technological advancements in the auto industry and an increasing market of hybrid and electric cars.

**Table 6-2: Energy Usage by Operational Activities.**

Energy Type		Units
Natural Gas Use (kBtu/yr) <sup>1</sup>		3,076,810
Electricity Use (kWh/yr) <sup>1</sup>		1,020,670
Total Annual Operation VMT <sup>1</sup> :  3,459,629	Annual Fuel Use (Gasoline) <sup>2</sup>	134,951
	Annual Fuel Use (Diesel) <sup>2</sup>	16,070
	MBTU/Year <sup>3</sup>	17,900
<ul style="list-style-type: none"> <li>• Data provided by CalEEMod (Appendix C)</li> <li>• Data provided by EMFAC (Appendix D)</li> <li>• MBTU Calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.116090 MBTU and 1 gallon of diesel = 0.139 MBTU</li> </ul>		

Source CalEEMod (v. 2020.4.0); EMFAC2017

The Project will have temporary increases in energy uses during construction; however, they will be minimized with BMPs in compliance with local, state, and federal regulations. After construction, the Project will operate with ZNE consumption. Therefore, the impact is *less than significant*.

**b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**No Impact:** The Project will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. The proposed project will conform to the energy efficiency standards outlined in California Code of Regulations Title 20, California Code of Regulations Title 24, and the Fresno General Plan. The applicable regulations would be implemented to reduce energy waste from the Project:

**Title 20:** California Code of Regulations Title 20 establishes energy efficiency standards for appliance efficiency and incorporation. Specifically, it centers around the

regulations set forth by the California Energy Commission (CEC) regarding energy conservation in various appliances, encompassing lighting fixtures, refrigerators, air conditioners, and water heaters. A product is deemed compliant with Title 20 if it meets the energy efficiency standards outlined by the CEC. The primary objective of these regulations is to institute and enforce standards that contribute to the reduction of energy consumption and the promotion of sustainable practices.

**Title 24:** California Code of Regulations Title 24, also known as the California Building Standards Code, contains regulations designed to ensure the energy efficiency, accessibility and overall safety of buildings. Title 24 is intended to align with the state of California's commitment to environmental stewardship and reducing the carbon footprint of buildings. The code is divided into 12 parts, each containing regulations and standards pertaining to their respective topics.

**Title 24, Part 11, (CALGreen Code):** Part 11 of California Building Standards Code specifically focuses on green building standards and sustainable construction practices. CALGreen Code was established to promote environmental sustainability in the construction industry and to minimize the environmental impact of buildings. Regulations within this code pertain to energy efficiency, water conservation, and indoor environmental quality.

**Fresno General Plan:** The Resource Conservation and Resilience Element of the City of Fresno's General Plan establishes crucial objectives and policies dedicated to the preservation of natural resources within Fresno. This element encompasses various aspects, including air resources, water resources, energy resources, and land resources. To conserve these essential resources, the element includes regulations pertaining to energy efficiency and renewable energy, highlighting Fresno's commitment to sustainable practices and the reduction of its environmental footprint.

PG&E will provide the energy to the site and is in the process of implementing the State-wide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. PG&E is expected to achieve at least 50% renewable energy by 2030 and 100% by 2045. Therefore, there is *no impact*.

In conclusion, the Project will not result in any impacts to energy resources beyond those analyzed in the City of Fresno General Plan PEIR.

<b>ENVIRONMENTAL ISSUES</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>VII. GEOLOGY AND SOILS</b> – Would the project:				
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 or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

## DISCUSSION

### 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 or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

**Less than Significant Impact:** The Project is located in an area of relatively low seismic activity; however, the project site could be affected by ground shaking from nearby faults. The potential for strong seismic ground shaking on the project site is not a significant environmental concern due to the infrequent seismic activity of the area and distance to the faults. The Project does not propose any components which could cause substantial adverse effects in the event of an earthquake. The project area is not located within a Fault-Rupture Hazard Area and no active faults have been identified within the project area. In addition, the Project has no potential to indirectly or directly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the rupture of an earthquake fault. Therefore, there is a *less than significant impact*.

- ii. **Strong seismic ground shaking?**

**Less than Significant Impact:** According to the 2018 Fresno County Hazard Mitigation Plan (HMP), the project site is located in an area of relatively low seismic activity. However, strong ground shaking could occur within the project site during seismic events and occurrences have the possibility to result in significant impacts.

Major seismic activity along the Great Valley Fault Zone or the Nunez Fault, or other associated faults, could affect the project site through strong seismic ground shaking. Strong seismic ground shaking could potentially cause structural damage to the proposed project. However, due to the distance to the known faults, hazards due to ground shaking would be minimal. In addition, compliance with the California Building Code (Title 24 CCR) would ensure that geotechnical design of the proposed project would reduce potential impacts related to strong seismic ground shaking to a less-than-significant impact.

### **iii. Seismic-related ground failure, including liquefaction?**

**Less than Significant Impact:** Soil liquification is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire “mobility” sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquify. Based on the predicted seismic accelerations, and soil and groundwater conditions typically encountered in the region, general liquefaction potential is low in the City of Fresno. Additionally, compliance with the Fresno Municipal Code and the California Building Code would ensure potential impacts associated with seismic-related ground failure, including liquefaction, would be less than significant.

### **iv. Landslides?**

**Less than Significant Impact:** The City of Fresno is considered at low risk of small landslides. There is potential for landslides and slumping along the steep banks of rivers, creeks, or drainage basins such as the San Joaquin River bluff and the many unlined basins and canals. However, the project site is generally flat and there are no hill slopes in the area and there are no geologic landforms on or near the project site that would result in a landslide event. As a result, there is very low potential for landslides. Therefore, the impact is less than significant.

### **b) Would the project result in substantial soil erosion or the loss of topsoil?**

**Less Than Significant Impact:** The potential for erosion is low since the project site is relatively flat. However, construction-related activities, such as grading and trenching, may increase the probability for erosion. Construction-related impacts related to erosion will be temporary and subject to Best Management Practices (BMPs), as required by the Stormwater Pollution Prevention Plan (SWPPP) for this project, which are developed to prevent significant impacts related to erosion from construction. BMPs can include fences, ponds, or seeding to manage water and

can help control runoff, therefore reducing the potential for erosion. Therefore, there is *less than significant impact*.

- c) **Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

**No Impact:** The soil types (San Joaquin loam, shallow, 0 to 3 percent slopes and San Joaquin sandy loam, shallow, 0 to 3 percent slopes) associated with the project site are considered stable and have a low capacity for landslides, lateral spreading, subsidence, liquefaction or collapse. The Project will not result in substantial grading that would increase the risk of landslides, lateral spreading, subsidence, liquefaction or collapse and therefore, there is *no impact*.

- d) **Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

**Less than Significant Impact:** Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. The project site is not in an area identified by the 2018 HMP as having expansive soils. Compliance with California Building Code requirements would ensure that geotechnical design of the proposed project would reduce potential impacts related to expansive soils to a less than significant impact.

- e) **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?**

**No Impact:** The soils on the project site (San Joaquin loam, shallow, 0 to 3 percent slopes and San Joaquin sandy loam, shallow, 0 to 3 percent slopes) are considered stable and can support the use of septic tanks or alternative wastewater systems. However, the Project will not include the use of septic tanks or any other alternative wastewater disposal systems. The wastewater from residential homes will tie into the existing City sewer infrastructure. Therefore, there will be *no impact*.

- f) **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant Impact With Mitigation:** There are no unique geologic features and no known paleontological resources located within the project area. However, there is always the possibility that paleontological resources may exist



below the ground surface. The project will adopt Mitigation Measure CUL-2, as detailed in the City of Fresno General Plan Program Environmental Impact Report (PEIR). Specifically, this measure is outlined in Section 5.5.5, which addresses Impact Analysis, Mitigation Measures, and the Level of Significance After Mitigation for Cultural Resources. These guidelines are designed to preserve cultural resources. Therefore, there will be *a less than significant impact with mitigation*.

#### Mitigation Measures

The proposed project shall implement and incorporate the geology and soils related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 2024.

**CUL-2:** Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed.

If prehistoric resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that buried prehistoric archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any prehistoric archaeological artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

If prehistoric resources are found during the field survey or literature review, the resources shall be inventoried using appropriate State record forms and submit the forms to the Southern San Joaquin Valley Information Center. The resources shall be evaluated for significance. If the resources are found to be significant, measures shall be identified by the qualified archaeologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance

or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring period shall be determined by the qualified archaeologist. If additional prehistoric archaeological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.

In conclusion, the Project will not result in any impacts to geologic resources beyond those analyzed in the City of Fresno General Plan PEIR.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VIII. GREENHOUSE GAS EMISSIONS</b> – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

## DISCUSSION

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less Than Significant Impact:** Greenhouse Gases (GHG) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF<sub>6</sub>)

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentration are largely determined by natural processes, such as oceanic evaporation.

GHGs have varying global warming potential (GWP) and atmospheric lifetimes. GWP is based on several factors, including the relative effectiveness of a gas to absorb

infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime").

*Construction:*

Greenhouse gases would be generated during construction from activities including site preparation, grading, building construction, application of architectural coatings, and paving. The CalEEMod Emissions report predicts that this project will create a maximum of 339.86 MT of CO<sub>2</sub>e emissions per year during construction. Because the SJVAPCD does not have numeric thresholds for assessing the significance of construction related GHG emissions, predicted emissions from project construction were compared to SCAQMD thresholds for construction related GHG emissions. The SCAQMD currently has a threshold of 10,000 metric tons of CO<sub>2</sub>e per year for construction emissions amortized over a 30-year project lifetime. Because project construction would generate far less GHG emissions than this threshold, impacts related to GHG emissions during project construction would be *less than significant*.

*Operation:*

The proposed project would have the following operational emissions:

- CO<sub>2</sub>: 1,450 metric tons per year
- CH<sub>4</sub>: 2.02 metric tons per year
- N<sub>2</sub>O: 0.0654 metric tons per year
- CO<sub>2</sub>e: 1,551 metric tons per year (combined CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions)

The SJVAPCD has not formally provided guidance on how to analyze GHG emissions impacts for projects within their San Joaquin Valley Air Basin (SJVAB). Until such time as SJVAPCD provides formal guidance, the following alternative metrics used by air districts in California to assess GHG emissions impacts have been identified:

**Bright-Line Numeric Threshold:** The bright-line significance threshold is a numeric, mass emissions threshold. In general, the bright-line threshold identifies the point at which additional analysis of project-related GHG emissions impacts is necessary. Projects below the established bright-line significance criteria have a de minimis contribution to the local, regional, and/or statewide GHG emissions inventory and have less than significant impacts. Projects above this threshold may result in a substantial increase in GHG emissions.

The bright-line threshold is based on the methodology identified in the 2008 CAPCOA white paper (CAPCOA 2008). It is a market capture approach, reflecting the amount of emissions that 90 percent of development projects surveyed in four cities within California would generate. CAPCOA identified that a bright-line threshold set at 900 metric tons of CO<sub>2</sub>e per year would capture 90 percent of projects. In general, 900 metric tons of CO<sub>2</sub>e per year corresponds to (1) a residential development of 50

dwelling units; (2) 35,000 square feet of office space; (3) 11,000 square feet of retail space; and (4) 6,300 square feet of supermarket space.

The 900 metric tons of CO<sub>2</sub>e per year is used as it is the most conservative bright-line threshold. Exceeding the bright-line significance criterion does not necessarily indicate that the project generates a significant unavoidable impact. Consistent with how the bright-line threshold is applied in other air districts, this analysis utilizes the bright-line thresholds as a screening criterion to identify whether a full analysis of GHG emissions is warranted. If the project exceeds the screening threshold, the second level of analysis will compare the project to the efficiency metric discussed below.

**Efficiency-Based Threshold for Residential Projects:** The efficiency metric identified by some air districts in California in the absence of a county-wide GHG reduction plan is derived from CARB's Scoping Plan. Residential projects that are over the bright line threshold would not be considered significant if their overall GHG efficiency is less than 6.7 MT CO<sub>2</sub>e/yr/capita. However, it is noted that this threshold is based, in part, on the GHG reducing target established for the year 2020 under AB 32, but the Project would be implemented after the year 2020. Statewide goals for GHG reductions in the years beyond 2020 were codified into state law with the passage of SB 32, which as described previously mandates that California achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. This equates to 40 percent below the statewide GHG reduction target for the year 2020. Therefore, a 40% reduction would be: 6.7 MT CO<sub>2</sub>e/yr/capita x 60% = 4.02 MT CO<sub>2</sub>e/yr/capita.

For this project: The average household size in the City of Fresno is 3.20 persons (US Census Bureau). The project consists of 128 units, leading to an estimated population of:  $128 \times 3.20 = 410$  people.

Using the efficiency-based threshold: The allowable emissions for this residential project would be  $410 \times 4.02 = 1,648$  metric tons of CO<sub>2</sub>e per year.

The total operational GHG emissions amount to 1,551 metric tons of CO<sub>2</sub>e per year. Since the project's emissions are below the efficiency-based threshold for residential projects (1,648 metric tons of CO<sub>2</sub>e per year), the project's operational GHG emissions are *considered less than significant*.

- b) **Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**No Impact:** The SJVAPCD states that individual and cumulative GHG emissions are considered less than significant if a project complies with an approved GHG emission reduction plan or GHG mitigation program within the geographic area in which the project is located. The 2021 GHG Reduction Plan meets the requirements for a qualified Greenhouse Gas Reduction Strategy. The Project is consistent with the

following applicable objectives and policies of the General Plan cited in the 2021 GHG Reduction Plan:

- **Policy LU-2-a: Infill Development and Redevelopment.** Promote development of vacant, underdeveloped, and re-developable land within the City limits where urban services are available by considering the establishment and implementation of supportive regulations and programs.

The Project location is not considered a priority infill area, which are located downtown and along transit corridors. However, the project will create denser development on a vacant parcel within the City limits surrounded by existing residential homes. The site is currently zoned RS-5, Residential Single Family with a planned land use of Residential – Medium Density (5.0-12 DU/acres).

- **Policy RC-2-b: Provide Infrastructure for Mixed-Use and Infill.** Promote investment in the public infrastructure needed to allow mixed-use and denser infill development to occur in targeted locations, such as expanded water and wastewater conveyance systems, complete streetscapes, parks and open space amenities, and trails. Discourage investment in infrastructure that would not meet these criteria.

The Project proposes denser development surrounded by existing residential homes located within the existing City limits to support efficient investment in public infrastructure.

- **Policy MT-5-a: Sidewalk Development.** Pursue funding and implement standards for development of sidewalks on public streets, with priority given to meeting the needs of persons with physical and vision limitations; providing safe routes to school; completing pedestrian improvements in established neighborhoods with lower vehicle ownership rates; or providing pedestrian access to public transportation routes.

The project site is currently vacant with no existing sidewalk facilities. The Project will develop sidewalks to encourage and promote pedestrian connectivity for people of all abilities.

- **Policy UF-14-b: Local Street Connectivity.** Design local roadways to connect throughout the neighborhoods and large private developments with adjacent major roadways and pathways of existing adjacent development. Create access for pedestrians and bicycles where a local street must dead end or be designed as a cul-de-sac to adjoining uses that provide services, shopping, and connecting pathways for access to the greater community.

The project site is currently vacant with no existing roadway facilities. The Project will develop local roadway connections with adjacent major roadways and

pathways of existing adjacent development. New access will be provided for pedestrians and bicyclists.

The General Plan and PEIR rely upon the Recirculated Greenhouse Gas Reduction Plan Update that provides a comprehensive assessment of the benefits of city policies and proposed code changes, existing plans, programs, and initiatives that reduce greenhouse gas emissions. The Recirculated Plan provides goals and supporting measures to reflect and ensure compliance with changes in the local and State policies while ensuring it encourages economic growth and keeps the city economically competitive while achieving GHG reductions, as discussed under VIII. GREENHOUSE GAS EMISSIONS

(b) and Mitigation Measure GHG-1.1 below.

The Greenhouse Gas Reduction Plan Update includes the following policies that are applicable to the implementation of the proposed project:

**Local Street Connectivity.** Design local roadways to connect neighborhoods and large private developments with adjacent major roadways and pathways of existing adjacent development. Create access for pedestrians and bicycles where a local street must dead end or be designed as a cul-de-sac to adjoining uses that provide services, shopping, and connecting pathways for access to the greater community area.

**Sidewalk Development.** Pursue funding and implement standards for development of sidewalks on public streets, with priority given to meeting the needs of persons with physical and vision limitations; providing safe routes to school; completing pedestrian improvements in established neighborhoods with lower vehicle ownership rates; or providing pedestrian access to public transportation routes.

**Renewable Energy.** Reduce the consumption of non-renewable energy resources by requiring and encouraging conservation measures and the use of alternative energy sources.

#### *Consistency with California's Post-2020 Targets*

The State's executive branch adopted several Executive Orders related to GHG emissions. Executive Orders S-3-05 and B-30-15 are two examples. Executive Order S-3-05 sets goals to reduce emissions to 1990 levels by 2020 and 80 percent below 1990 levels by 2050. The goal of Executive Order S-3-05 to reduce GHG emissions to 1990 levels by 2020 was codified by AB 32. The Project, as analyzed above, is consistent with AB 32. Therefore, the Project does not conflict with this component of Executive Order S-3-05. Executive Order B-30-15 establishes an interim goal to reduce GHG emissions to 40 percent below 1990 levels by 2030.

#### *Consistency with SB 32*

The 2017 Climate Change Scoping Plan Update (2017 Scoping Plan) includes the strategy that the State intends to pursue to achieve the 2030 targets of Executive Order S-3-05 and SB 32. The Project is required to comply with the SB 32 strategy and is not expected to conflict with this component of Executive Order S-3-05. As discussed above, the proposed Project will not occur at scale or scope with the potential to contribute substantially or cumulatively to the generation of GHG emissions, either directly or indirectly, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. There would be a less than significant impact with mitigation incorporation as the Project would adhere to standards as identified in the Fresno City General Plan and PEIR (GHG-1.1). In conclusion, the proposed Project will not result in any GHG impacts beyond those analyzed in City of Fresno PEIR. Therefore, impacts are considered less than significant with mitigation incorporated.

*Consistency with the CARB 2022 Scoping Plan*

The California Air Resources Board (CARB) recommends initially determining whether a proposed residential development aligns with the State's climate goals by examining if the project includes key attributes that reduce operational GHG emissions and advance fair housing. According to the 2022 Scoping Plan, residential projects incorporating all key attributes listed in the relevant table are deemed consistent with the State's priority GHG reduction strategies and climate and housing goals. Consequently, such projects would be considered consistent with the Scoping Plan and result in less significant impacts under CEQA. However, the Scoping Plan grants lead agencies the discretion, with additional supporting evidence, to find that projects incorporating some, but not all, key attributes can still be consistent with the State's climate goals. As detailed in the table below, the proposed project aligns with all applicable key attributes.

<b>Scoping Plan Summary Analysis</b>	<b>Scoping Plan Summary Analysis</b>
Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	Consistent: New one- and two-unit single family dwellings or townhouses with attached private garages must have electrical conduit installed that is capable of supporting a Level 2 EV charging station. The homes will support Level 2 charging.
Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)	Consistent: The project is on a infill site surrounded by other uses.



Does not result in the loss or conversion of natural and working lands	Consistent: The project will not result in the loss or conversion of natural and working lands.
Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS	Consistent: The project is .25 miles from a bus stop (Brawley and Dayton)
Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit;	Consistent: No parking provided.
At least 20 percent of units included are affordable to lower-income residents	N/A: Housing costs have not been determined.
Results in no net loss of existing affordable units	Consistent: No units are lost with this project.
Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	Consistent: The Project would meet all mandatory requirements as outlined in the 2022 Energy Code and verified through the building permit process.

The Project is consistent with the 2021 GHG Reduction Plan policies listed above. In addition, the Project will comply with all local, state and federal regulations pertaining to the regulation of GHGs and will implement Best Performance Standards developed by the SJVAPCD. The Project will not conflict with any plan, policy, or regulation developed to reduce GHG emissions and therefore, there is *a less than significant impact*.

In conclusion, the Project will not result in any impacts to GHGs beyond those analyzed in the City of Fresno General Plan PEIR.

<b>ENVIRONMENTAL ISSUES</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>IX. HAZARDS AND HAZARDOUS MATERIAL – Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

## DISCUSSION

### a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Less than Significant Impact:** Construction activities may involve the use, storage, and transport of hazardous materials. The Fresno General Plan states that hazardous materials are defined as substances that, due to their physical or chemical properties, quantity, concentration, or other characteristics, may (1) increase mortality or cause serious, irreversible, or incapacitating illness, or (2) pose a substantial present or potential hazard to human health or the environment when not properly treated, stored, transported, disposed of, or otherwise managed. Hazardous materials are widely used in commercial, agricultural, and industrial applications and, to a lesser extent, in residential areas. Hazardous wastes share the same definition and refer to hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. During construction, the contractor will use fuel trucks to refuel onsite equipment and may use paints and solvents to a limited degree. The storage, transport, and use of these materials will comply with local, state, and federal regulatory requirements. This includes the following:

**Labeling and Placarding:** Vehicles transporting hazardous materials must have appropriate placards to identify the nature of the hazard, in accordance with both DOT and state-specific requirements.

**Training:** Individuals handling or transporting hazardous materials must receive proper training under the standards set by OSHA (Occupational Safety and Health Administration) and supported by state regulations.

**Emergency Response Plans:** Entities must have detailed emergency response plans that outline procedures for handling accidents involving hazardous materials.

There is the potential for small leaks due to refueling of construction equipment, however, standard construction BMPs included in the SWPPP will reduce the potential for the release of construction related fuels and other hazardous materials by controlling runoff from the project site and requiring proper disposal or recycling of hazardous materials. Grading and excavation may expose hazardous substances present in the soil or groundwater. However, The Department of Toxic Substances Control's (DTSC) Envirostor was used to identify any sites known to be associated with releases of hazardous materials or wastes compiled pursuant to Government Code Section 65962.5. The database indicates that there are no hazardous material sites located on or adjacent to the Project. Therefore, the impact is *less than significant*.

- b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less than Significant Impact:** The only reasonably foreseeable conditions or incidents involving the Project that could result in release of hazardous materials into the environment are any potential accidental release of standard fuels, solvents, or chemicals encountered during typical construction of a residential subdivision. Should an accidental hazardous release occur or should the Project encounter hazardous soils, existing regulations for handling hazardous materials require coordination with the DTSC for an appropriate plan of action, which can include studies or testing to determine the nature and extent of contamination, as well as handling and proper disposal. Therefore, the impact is *less than significant*.

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

**No Impact:** The Project is located approximately 0.4 miles from John Steinbeck Elementary School and 0.6 miles from Central East High School. According to the General Plan Land uses, no proposed schools are within a quarter mile of the project site. The Project does not involve the use or storage of hazardous substances other than small amounts of fuel, paint, pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping during operation. Construction activities may involve the use, storage, and transport of minimal hazardous materials such as fuel and paint. Exhaust from construction is expected to be minimal and not significant. The Project will not emit hazardous emissions or involve the handling of acutely hazardous materials or waste. Therefore, the impact will be *no impact* related to the potential to emit hazardous emissions or handle hazardous or acutely

hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- d) **Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Impact:** The project site is not listed as a hazardous materials site by DTSC, pursuant to Government Code Section 65962.5 and therefore, there is *no impact*.

- 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?**

**No Impact:** The Project is located approximately 4 miles north of the nearest airport (Fresno Chandler Executive Airport). According to the Fresno County Airport Land Use Compatibility Plan, the Project will not be impacted by any airports. The proposed single-family residential development is consistent with the existing residential zoning of the surrounding land uses and will not result in safety hazard or excessive noise for residents in the area. Therefore, there is *no impact*.

- f) **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact:** The California Emergency Services Act requires cities to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. The City's full-time Emergency Preparedness Officer (EPO) is responsible for ensuring that Fresno's emergency response plans are up-to-date and implemented properly. The EPO also facilitates cooperation between City departments and other local, State and federal agencies that would be involved in emergency response operations. The City of Fresno Emergency Operations Center (EOC) serves as the coordination and communication between the City of Fresno and Fresno County Operational Area EOC. The proposed project would not result in any alterations of existing roadways that would block the circulation of emergency response services or introduce elements that would conflict with the operations of the EOC. Therefore, the proposed project would not interfere with emergency evacuation plans in the City, and this impact would be less than significant.

**g) Would the project expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?**

**No Impact:** The project site is surrounded by urban land uses and is not considered to be wildlands nor at risk for wildland fires. In addition, the 2018 HMP determined that fire hazards within the City of Fresno have low frequency, limited extent, limited magnitude, and low significance. Therefore, there is *no impact*.

In conclusion, the Project will not result in any impacts to hazards or hazardous materials beyond those analyzed in the City of Fresno General Plan PEIR.

<b>ENVIRONMENTAL ISSUES</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>X. HYDROLOGY AND WATER QUALITY</b> – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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 a substantial erosion or siltation on- or off-site;		X		
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:		X		
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		X		
iv) impede or redirect flood flows?		X		

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

## DISCUSSION

### a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**Less than Significant with Mitigation:** Construction activities may include excavation, grading and other earthwork on the 15.82-acre project site. Prior to construction and issuance of a grading permit, the Applicant will submit a NOI and SWPPP to the RWQCB to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity. The SWPPP will identify all potential sources of pollution and BMPs to mitigate polluted stormwater discharges, including stockpiling/disposing demolition debris (concrete, waste, and soil) properly, protect existing storm drain inlets, stabilize disturbed areas, implement erosion/sediment control measures, and properly maintain construction materials. The requirements of the SWPPP will be incorporated into design specifications and construction contracts.

In addition, the Applicant will submit a drainage plan that identifies post-construction treatment, control, and design measures that minimize surface water runoff, erosion, siltation, and pollution. The drainage plan shall be prepared in accordance with the *City of Fresno Urban Water Management Plan (2020 UWMP) (2020)* and California Stormwater Quality Association's Storm Water Best Management Practices Handbook as well as the City Engineer's Technical Specifications and Public Improvement Standards. During final design of the Project, the Project proponent shall implement a suite of post-construction stormwater treatment and control BMPs designed to address the most likely sources of stormwater pollutants resulting from operation and maintenance of the Project. These measures shall account for the proposed 15.82-acre of residential development. Stormwater infrastructure will be designed adhering to methods and standards described in Section E.12.e.ii.c of the SWRCB Phase II Small MS4, General Permit (Order No. 2013-0001-DWQ).



The City Engineer may also require other necessary BMPs and design features. Incorporation of City Engineer-approved BMPs and design features into the Project design and construction documents shall ensure that operational water quality exceeds applicable water quality standards. The Project proponent shall also prepare and submit an Operations and Maintenance Agreement to the City of Fresno for its approval identifying appropriate procedures to ensure that stormwater quality control measures work properly during operations.

During operation, the long-term operation and maintenance of post-construction stormwater controls will be documented in the Project's Development Maintenance Manual. The manual shall require that stormwater BMP devices be inspected, cleaned and maintained in accordance with the manufacturer's maintenance conditions. Other maintenance items include:

- Devices shall be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid- May);
- All devices be checked after major storm events;
- Runoff shall be directed away from trash and loading dock areas;
- Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes;
- Trash areas shall be screened or walled to minimize offsite transport of trash; and
- Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system.

With PEIR mitigation measures incorporated (HYD-3.1 through HYD-3.4), the Project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality impacts beyond those analyzed in the City of Fresno PEIR. Therefore, Project impacts are *less than significant with mitigation incorporated*.

**b) Would the project substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less than Significant Impact:** Water services will be provided by the City of Fresno upon development.

The City has 272 active wells, which pump an average of 146 million gallons of water per day (MGD). According to City's 2020 UWMP, the projected water supply for Fresno in year 2030 is 341,140 AFY, which is comprised of both groundwater, surface water, and recycled water.

Using average per-person water use in the State of California (85 gallons; California Legislative Analyst's Office, 2017) and the average household size in the City of Fresno (3.20 persons; US Census Bureau), water demand for the proposed 128-unit residential development is estimated to be approximately 34,816 gallons of water daily, or 39 AFY. While the Project will increase overall water demand, the proposed land use is consistent with the City of Fresno General Plan land use designation for medium-density residential. These impacts to groundwater supplies in the Kings River Sub-basin have been analyzed in the City of Fresno General Plan PEIR.

The Project will develop impervious surfaces on currently undeveloped, pervious surfaces on the approximately 15.89-acre project site. However, the Project will be designed to collect and divert stormwater as well as retain stormwater on-site where feasible.

Since the project will not decrease groundwater supplies beyond what has been planned for in the City of Fresno General Plan nor interfere with groundwater recharge, the impact is *less than significant*.

**c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:**

**i. Result in substantial erosion or siltation on- or off-site?**

**Less than Significant with Mitigation:** The Project will result in the increase of impervious surfaces, which could result in substantial erosion or siltation on- or off-site. However, during construction, substantial erosion or siltation on- or off-site will be minimized with BMPs identified in the SWPPP. During operation, substantial erosion or siltation on- or off-site will be minimized by properly maintaining post-construction BMPs identified in the drainage plan and Development Maintenance Manual. The Project would comply with the City's grading plan check process, the Fresno Metropolitan Flood Control District (FMFCD) Storm Drainage and Flood Control Master Plan (SDFCMP). Therefore, the Project would have a less than significant impact on drainage patterns or cause substantial erosion or siltation on or off the site. With implementation of applicable PEIR mitigation measures HYD-3.1 through HYD-3.4, the Project will not substantially result in substantial erosion or siltation on or offsite beyond those analyzed in the City of Fresno PEIR. The impact would be *less than significant with mitigation incorporated*.

**ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?**

**Less than Significant with Mitigation:** The Project will result in the increase of impervious surfaces, which will increase the amount of surface runoff that could result

in flooding on- or off-site. However, during construction, the rate or amount of surface runoff will be minimized with temporary BMPs identified in the SWPPP to prevent flooding on- or offsite. During operation, the rate or amount of surface runoff will be minimized with permanent post-construction BMPs identified in the drainage plan and Development Maintenance Manual to minimize flooding on- or off-site. See the construction and post-construction BMPs listed above. With implementation of applicable PEIR mitigation measures HYD-3.1 through HYD-3.4, the Project will not substantially result in substantial erosion or siltation on or offsite beyond those analyzed in the City of Fresno PEIR. The impact would be *less than significant with mitigation incorporated*.

**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?**

**Less than Significant with Mitigation:** The Project will result in the increase of impervious surfaces, which could contribute runoff water which could have the potential to impact existing stormwater drainage systems or provide additional sources of polluted runoff. However, during construction, runoff quantities will be minimized with temporary BMPs identified in the SWPPP to prevent runoff from exceeding the capacity of existing or new stormwater drainage systems or increasing sources of polluted runoff. During operation, runoff quantities will be minimized with permanent post-construction BMPs identified in the drainage plan and Development Maintenance Manual to prevent runoff from exceeding the capacity of existing or new stormwater drainage systems or increasing sources of polluted runoff. The Project proponent will be required to prepare drainage plans and a Development Maintenance Manual to ensure that the project would not overwhelm existing or planned stormwater drainage systems or result in discharges of polluted runoff into local waterways. HYD-3.1 through HYD-3.4 in the City of Fresno PEIR requires projects to implement measures aimed toward reducing impacts on the capacity of existing or planned SDFCMP collection systems and to coordinate with FCMFCD. The impact is less than significant with implementation of these mitigation measures.

**iv. Impede or redirect flood flows?**

**Less than Significant with Mitigation:** The Project will result in the increase of impervious surfaces, which could contribute to flows being impeded or redirected. However, during construction, runoff flows will be minimized with temporary BMPs identified in the SWPPP to prevent any impediment or redirection of flood flows. During operation, runoff flows will be minimized with permanent post-construction BMPs identified in the drainage plan and Development Maintenance Manual to prevent any impediment or redirection of flood flows. In addition, drainage plans will be submitted to the City Engineer prior to the issuance of grading permits. With implementation of applicable PEIR mitigation measures HYD-3.1 through HYD-3.4,

the proposed Project would not redirect flood flows beyond those analyzed in the City of Fresno PEIR. Therefore, Project impacts are *less than significant with mitigation incorporated*.

**d) Would the project, in flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation?**

**No Impact:** The Project is located approximately 130 miles inland from the ocean and is not located near a large body of water; therefore, it would not be affected by a tsunami. The project site is relatively flat and would not be impacted by inundation related to mudflow. According to FEMA flood maps, the Project is in Flood Zone X, area of minimal flood hazard. Since the Project is located in an area that is not susceptible to inundation, the Project would not risk the release of pollutants due to project inundation. Therefore, there is *no impact*.

**e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less than Significant Impact:** The project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The proposed project is consistent with the City of Fresno UWMP, City of Fresno Metropolitan Water Resources Management Plan, and the North Kings Groundwater Sustainability Plan. The City of Fresno UWMP includes the following policies from the General Plan that align with the proposed project:

- Policy NS-3-b: Curb and Gutter Installation. Coordinate with Fresno Metropolitan Flood Control District (FMFCD) to install curbing, gutters, and other drainage facilities with priority to existing neighborhoods with the greatest deficiencies and consistent with the Storm Drainage and Flood Control Master Plan.
- Policy NS-3-e: Pollutants. Work with FMFCD to prevent and reduce the existence of urban stormwater pollutants pursuant to the requirements of the National Pollution Discharge Elimination Systems Act.
- Policy NS-3-h. Runoff Controls. Implement grading regulations and related development policies that protect area residents from flooding caused by urban runoff produced from events that exceed the capacity of the Storm Drainage and Flood Control Master Plan system of facilities. Place all structures and/or flood-proofing in a manner that does not cause floodwaters to be diverted onto adjacent property, increase flood hazards to other property, or otherwise adversely affect other property.
- Policy NS-3-i: New Development Must Mitigate Impact. Require new development to not significantly impact the existing storm drainage and flood control system by imposing conditions of approval as project mitigation, as authorized by law. As part of this process, closely coordinate and consult with

the FMFCD to identify appropriate conditions that will result in mitigation acceptable and preferred by FMFCD for each project.

- Policy NS-3-k: 100-Year Floodplain Policy. Require developers of residential subdivisions to preserve those portions of development sites as open space that may be subject to 100-year flood events, unless the flood hazard can be substantially mitigated by development project design.

The proposed project also falls within the North Kings Groundwater Sustainability Plan. Over the last several decades drought and other challenges have contributed to a decline in the overall groundwater supply in the North Kings region. The project shall comply with the aims and objectives of this Plan to ensure that the basin will maintain a reliable water supply for current and future uses. Furthermore, the project will implement PEIR Mitigation Measures HYD-3.1 through HYD-3.4 and UTL1.1.1 and UTL-1.2.1. to minimize the impact on the City's water resources. The impact is *less than significant* with mitigation incorporated.

#### *Mitigation Measures*

The proposed project shall implement and incorporate the hydrology related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 2024.

- **Mitigation Measure HYD-3.1:** The City shall implement the following measures to reduce the impacts on the capacity of existing or planned SDFCMP collection systems:
  - Coordinate with FMFCD to implement the existing Storm Drainage and Flood Control Master Plan (SDFCMP) for collection systems in drainage areas where the amount of imperviousness is unaffected by the change in land uses.
  - Coordinate with FMFCD to update the SDFCMP in those drainage areas where the amount of imperviousness increased due to the change in land uses to determine the changes in the collection systems that would need to occur to provide adequate capacity for the stormwater runoff from the increased imperviousness.
  - As development is proposed, implement current SDFCMP to provide stormwater collection systems that have sufficient capacity to convey the peak runoff rates from the areas of increased imperviousness.
  - Require developments that increase site imperviousness to install, operate, and maintain FMFCD approved on-site detention systems to reduce the peak runoff rates resulting from the increased imperviousness to the peak runoff rates that will not exceed the capacity of the existing stormwater collection systems.
- **Mitigation Measure HYD-3.2:** The City shall implement the following measures to reduce the impacts on the capacity of existing or planned SDFCMP retention

basins: Prior to approval of development projects, coordinate with FCMFCD to analyze the impacts to existing and planned retention basins to determine remedial measures required to reduce the impact on retention basin capacity to less than significant. Remedial measures would include:

- Increase the size of the retention basin through the purchase of more land or deepening the basin or a combination for planned retention basins.
  - Increase the size of the emergency relief pump capacity required to pump excess runoff volume out of the basin and into adjacent canal that convey the stormwater to a disposal facility for existing retention basins.
  - Require developments that increase runoff volume to install, operate, and maintain, Low Impact Development (LID) measures to reduce runoff volume to the runoff volume that will not exceed the capacity of the existing retention basins.
- **Mitigation Measure HYD-3.3:** The City shall implement the following measures to reduce the impacts on the capacity of existing or planned SDFCMP urban detention (stormwater quality) basins: Prior to approval of development projects, coordinate with FCMFCD to determine the impacts to the urban detention basin weir overflow rates and determine remedial measures required to reduce the impact on the detention basin capacity to less than significant. Remedial measures would include:
    - Modify overflow weir to maintain the suspended solids removal rates adopted by the FMFCD Board of Directors.
    - Increase the size of the urban detention basin to increase residence time by purchasing more land. The existing detention basins are already at the adopted design depth.
    - Require developments that increase runoff volume to install, operate, and maintain, Low Impact Development (LID) measures to reduce peak runoff rates and runoff volume to the runoff rates and volumes that will not exceed the weir overflow rates of the existing urban detention basins.
- **Mitigation Measure HYD-3.4:** The City shall implement the following measures to reduce the impacts on the capacity of existing or planned SDFCMP pump disposal systems:
    - Prior to approval of development projects, coordinate with FCMFCD to determine the extent and degree to which the capacity of the existing pump system will be exceeded.
    - Require new developments to install, operate, and maintain on-site detention facilities, consistent with FMFCD design standards, to reduce peak stormwater runoff rates to existing planned peak runoff rates.
    - Provide additional pump system capacity to maximum allowed by existing permitting to increase the capacity to match or exceed the peak runoff rates determined by the SDFCMP.

- **Mitigation Measure UTL-1.1.1:** The City shall evaluate the water conveyance system and, at the time that discretionary projects are submitted for approval by the City, the City shall not approve development that would demand additional water and exceed the capacity of a facility until additional capacity is provided. The following capacity improvements shall be evaluated for potential environmental impacts and constructed by the City by approximately 2025.
  - Construct 65 new groundwater wells, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.
  - Construct a 2.0-million-gallon potable water reservoir (Reservoir T2) near the intersection of Clovis and California Avenues, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.
  - Construct a 4.0-million-gallon potable water reservoir (Reservoir T5) near the intersection of Ashlan and Chestnut Avenues, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.
  - Construct a 4.0-million-gallon potable water reservoir (Reservoir T6) near the intersection of Ashlan Avenue and Highway 99, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.
  - Construct 50.3 miles of regional water transmission mains ranging in size from 24-inch to 48-inch, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.
  - Construct 95.9 miles of 16-inch transmission grid mains in accordance with Chapter 9 and Figure 9- 1 of the 2014 Metro Plan Update.

Prior to initiating construction of any of the capacity improvement projects identified above, the City shall conduct appropriate environmental analyses for each project to determine whether environmental impacts would occur.

- **Mitigation Measure UTL-1.2.1:** The City shall evaluate the water supply system at the time discretionary projects are submitted and shall not approve development that would demand additional water until additional capacity is provided. By approximately the year 2025, the following capacity improvements shall be evaluated for potential environmental impacts and constructed by the City.
  - Construct an approximately 30 mgd expansion of the existing northeast surface water treatment facility for a total capacity of 60 mgd, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.
  - Construct an approximately 20 mgd surface water treatment facility in the southwest portion of the City, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. Construct a 25,000 AF/year recycled water facility as an expansion to the RWRF in accordance with the January 2014 City of Fresno Metropolitan Water Resources Management Plan. This improvement is required after the year 2025.

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

## DISCUSSION

### • Physically divide an established community?

**No Impact:** The Project will not physically divide an established community because the Project proposes to develop a vacant site with single-family residential development, which is consistent with the surrounding residential land uses. Therefore, there is *no impact*.

### b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**No Impact:** The Project will develop single-family residential homes, which is consistent with the underlying zoning, RS-5, Residential Single-Family, Medium Density by the City of Fresno Zoning Code and Residential – Medium Density by the City of Fresno General Plan. The Project does not conflict with any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and therefore, there is *no impact*.

In conclusion, the Project will not result in any impacts to land uses beyond those analyzed in the City of Fresno General Plan PEIR.



ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XII. MINERAL RESOURCES</b> – Would the project:				
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?				X
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?				X

## DISCUSSION

### 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?

**No Impact:** There are no known mineral resources within or in the vicinity of the Project site. The principal area for mineral resources in the City is along the San Joaquin River Corridor. The project site is approximately 4.5 miles south from the San Joaquin River Corridor. Therefore, the Project will not affect the availability of a known mineral that would be of a value to the region and the residents of the state and there is *no impact*.

### b) Would the project result in the loss of availability of a locally - important mineral resource recovery site delineated on a local general plan, specific plan or other lands use plan?

**No Impact:** The Project will not affect the availability of a known mineral resource since the project site has no known mineral resources. In addition, the project site is not designated as an important mineral resource recovery site by the City of Fresno General Plan. Therefore, there is *no impact*.

In conclusion, the Project will not result in any impacts to mineral resources beyond those analyzed in the City of Fresno General Plan.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIII. NOISE</b> – Would the project result in:				
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?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X

## DISCUSSION

- 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 in other applicable local, state, or federal standards?**

**Less than Significant Impact with Mitigation:** The 2020 City of Fresno General Plan Update and associated PEIR provides noise level criteria for land use compatibility for both transportation and non-transportation noise sources. The General Plan sets noise compatibility standards for transportation noise sources in terms of the Day-Night Average Level (Ldn). The Ldn represents the time-weighted energy average noise level for a 24-hour day, with a 10-dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The Ldn represents cumulative

exposure to noise over an extended period of time and is therefore calculated based upon annual average conditions. Implementing Policy NS-1-h of the Noise Element requires that interior noise levels attributable to exterior transportation noise sources not exceed 45 dB Ldn. The intent of the interior noise level standard is to provide an acceptable noise environment for indoor communication and sleep.

*Policy NS-1-h: Interior Noise Level Requirement.* Comply with the State Code requirement that any new multifamily residential, hotel, or dorm buildings must be designed to incorporate noise reduction measures to meet the 45 dB Ldn interior noise criterion, and apply this standard as well to all new single-family residential and noise sensitive uses.

### *Operational*

The proposed development of single-family homes will not result in a significant increase in ambient noise levels in the surrounding residential areas. Ambient noise measurements conducted as part of the project's acoustical analysis indicate that existing noise levels primarily stem from traffic on nearby roadways and typical residential activities. The introduction of new single-family homes will generate noise levels consistent with those currently experienced in similar residential neighborhoods. The projected noise levels, which include typical activities such as vehicle movements, household appliances, and outdoor conversations, are anticipated to remain well within the City of Fresno's noise level standards for residential areas.

Additionally, the project design includes appropriate setbacks and landscaping buffers, which will help mitigate any potential increase in noise. The analysis shows that the noise levels from the new development will not exceed the established threshold of increasing ambient noise by 3 dBA or more, a level recognized by the City of Fresno as the minimum change perceptible to most people and considered to be a significant increase. Therefore, the ambient noise environment for the surrounding homes will not be significantly impacted, ensuring the continued comfort and quality of life for current residents.

### *Construction*

No standardized criteria have been developed for assessing construction noise impact in Fresno. The FTA Transit Noise and Vibration Impact Assessment Manual (2018) identifies noise levels exceeding 85 dBA at 50 feet from the source as significant for construction activities. The Caltrans Technical Noise Supplement (TeNS) to the Traffic Noise Analysis Protocol (2013) and the Caltrans Traffic Noise Analysis Protocol (2020) both outline criteria where noise levels above 80 dBA necessitate mitigation measures for significant impacts. The Occupational Safety and Health Administration (OSHA) sets permissible exposure limits for occupational noise exposure at 90 dBA

over an 8-hour workday and recommends hearing protection for levels above 85 dBA. Additionally, the Environmental Protection Agency (EPA) Noise Control Act guidelines recognize 85 dBA or higher as potentially harmful and requiring control measures. These sources provide comprehensive thresholds to evaluate and manage construction noise impacts effectively.

The construction of the Project will cause short-term noise impacts to nearby sensitive receptors, varying based on the construction phase and proximity to the active zone. These noise disturbances will be intermittent, generally lasting from one to several days. Table 3-11 outlines the expected noise types and levels during construction.

During grading and site preparation, short-term noise impacts are expected. According to Table 3-11, typical construction equipment noise levels (L<sub>max</sub>) are based on a distance of 50 feet from the equipment to a noise receptor, following the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related noise levels will exceed the existing ambient noise levels but will cease upon Project completion.

**Table 3-11: Typical Construction Equipment Noise Levels**

Equipment	Acoustical Usage Factor (%)	Maximum Noise Level (L <sub>max</sub> ) at 50 Feet
Air Compressors	40	78
Excavators	40	81
Cranes	16	81
Generators	50	81
Pavers	50	77
Rollers	20	80
Front End Loaders	40	79
Backhoes	40	78
Dozer	40	82
Scrapers	40	84
Welders	40	74
Pick-Up Truck	40	75
Flat Bed Truck	40	74
Dump Truck	40	76

*Source: FHA Construction Noise Handbook.*

Two primary types of short-term noise impacts are anticipated:

1. Increased noise levels on access roads due to construction crews commuting and transporting equipment and materials to the Site. This may result in noise exposure of up to 76 dBA L<sub>max</sub> at 50 feet, as shown in the bottom three rows of Table 3-11.
2. Noise generated by grading and construction activities on the Project Site. Different construction phases involve various equipment, resulting in varying noise characteristics. For example, site preparation with loud earthmoving equipment like scrapers, dozers, and front loaders will generate noise levels up to 84 dBA

Lmax at 50 feet during the noisiest phases. These equipment cycles typically involve 1-2 minutes of full-power operation followed by 3-4 minutes at lower power settings.

Construction details, such as fleet activities, are not yet known. This analysis assumes simultaneous operation of scrapers, bulldozers, and water/pickup trucks, which would generate approximately 84 dBA Lmax at 50 feet.

The closest sensitive receptors, single-family residential properties adjacent to the southern and eastern boundaries of the project site, are about 35 feet from construction activities. Noise reduction of 6 dBA per doubling of distance predicts an increase of about 3 dBA from the active construction area to the nearest residence. Additionally, a solid wood fence around these residences will reduce noise by approximately 5 dBA (FHWA, Noise Barrier Design Handbook), resulting in a potential maximum noise exposure of 82 dBA Lmax (84 dBA + 3 dBA - 5 dBA) at the nearest residential property during active construction periods.

To further reduce the noise levels, mitigation measure NOI-1 will require sound walls. Sound walls are effective in reducing noise levels, with typical reductions ranging from 5 to 15 dBA and potential reductions up to 20 dBA in optimal conditions. According to the Federal Highway Administration (FHWA) Noise Barrier Design Handbook, noise barriers commonly achieve reductions of 5 to 10 dBA, with higher reductions possible under ideal conditions. The Caltrans Technical Noise Supplement (TeNS) also notes typical reductions of 5 to 15 dBA, depending on design and site-specific factors. The Environmental Protection Agency (EPA) supports these findings, indicating that noise barriers can reduce noise by 5 to 10 dBA, with potential for greater reductions. Additionally, the American National Standards Institute (ANSI) S12.8-1998 standard confirms that noise barriers commonly provide reductions in the range of 5 to 15 dBA. This will reduce the noise by a minimum of 5 dBA. At a maximum, the construction noise would be 77 dBA, lower than the 80 dBA threshold.

Construction activities will vary within the 15.82-acre site, generating maximum noise levels only when operations are closest to the receptor. To mitigate potential construction-related noise impacts, Mitigation Measure NOI-2 requires all construction equipment, fixed or mobile, to be equipped with properly functioning and maintained mufflers per manufacturers' standards.

Additionally, construction activities will be limited to Monday-Saturday between the hours of 7:00 a.m. and 10:00 p.m. in compliance with Section 10-109 of the Fresno Municipal Code.

Implementation of mitigation measures NOI-1 and NOI-2 will ensure that the project's construction-related noise impacts remain *less than significant with mitigation*.

**b) Would the project result in generation of excessive ground-borne vibration or groundborne noise levels?**

**Less than Significant Impact:** Construction activities could introduce temporary groundborne vibration to the project site and surrounding area. Sources that may produce perceptible vibrations are provided in Table 3-11. The primary source of vibration during construction will likely be from a bulldozer (tractor), which would generate 0.089 inch per second peak particle velocity at 25 feet with an approximate vibration level of 87 dB. Vibration from the bulldozer would be intermittent and not a continuous source of vibration. The City of Fresno General Plan PEIR states that vibration sources of less than 0.1 inch/second will not have the potential to damage fragile structures and all construction-related vibrations will not exceed 0.1 inch/second.

**Table 3-11: Vibration Levels Generated by Construction Equipment**

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level (LV) at 25 feet
Pile driver (impact)	1.518 (upper range) 0.644 (typical)	112 104
Pile driver (sonic)	0.734 upper range 0.170 typical	105 93
Clam shovel drop (slurry wall)	0.202	94
Hydromill (slurry wall)	0.008 in soil 0.017 in rock	66 75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

*Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.*

Operations will not include uses or activities that generate excessive groundborne vibration or groundborne noise levels. Therefore, the impact is *less than significant*.

**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 public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact:** The Project is located approximately 4 miles from the nearest airport, Fresno Chandler Executive Airport. See Figure 3-3, Sensitive Sites Map. In addition, it is not located within an area subject to an airport land use plan because it is not located within an airport influence area (AIA), as delineated within the Fresno County Airport Land Use Compatibility Plan (ALUCP). Therefore, the Project would not expose people residing or working in the project area to excessive noise levels. There is *no impact*.

### *Mitigation Measures*

**Mitigation Measure NOI-1:** Installation of Temporary Noise Barriers: Prior to the commencement of construction activities, the contractor shall install temporary noise barriers along the western and southern perimeters of the construction site, adjacent to the residential areas.

- The noise barriers shall be a minimum of 12 feet in height and constructed of materials with a minimum Sound Transmission Class (STC) rating of 25. Suitable materials include plywood, mass-loaded vinyl, or other acoustically equivalent materials.
- The noise barriers shall be continuous along the western and southern boundaries of the construction area, ensuring there are no gaps or openings that would allow noise to pass through. The barriers shall extend sufficiently beyond the construction area to ensure maximum noise attenuation for the residential areas.
- The contractor shall regularly inspect and maintain the noise barriers to ensure their effectiveness throughout the construction period. Any damage or gaps in the barriers shall be repaired promptly.
- This mitigation measure shall be implemented prior to the start of construction and maintained throughout the entire construction period.

**Mitigation Measure NOI-2:** The project contractor shall implement the following measures during construction of the project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities.
- Ensure that all general construction-related activities are restricted to between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday. No construction shall occur on Sunday.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIV. POPULATION AND HOUSING</b> – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

## DISCUSSION

- a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**Less than Significant Impact:** The Project proposes the development of single-family residential homes on land which is currently vacant; however, this new development has been planned for and is consistent with the underlying zoning, RS-5, Residential Single-Family, Medium Density by the City of Fresno Zoning Code and Residential – Medium Density by the City of Fresno General Plan. Therefore, there is *a less than significant impact*.

- b) **Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No Impact:** The project site is currently vacant with no existing residential structures. The Project would not displace any existing people or housing and would build new housing. Therefore, there is *no impact*.

In conclusion, the Project will not result in any population and housing impacts beyond those analyzed in the City of Fresno General Plan PEIR.



ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XV. PUBLIC SERVICES</b> – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?			X	
iv. Parks?			X	
v. Other public facilities?			X	

## DISCUSSION

a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

i. **Fire protection?**

**Less than Significant Impact:** The City of Fresno Fire Department (FFD) would provide fire protection services to the proposed project. The closest fire station is Fresno Fire Station No. 16 at 2510 Polk Avenue, located approximately 1.3 miles from the project site. The Project proposes 128 new single-family residential homes, which will increase the demand for fire protection services. However, the

proposed land use has been planned for by the General Plan. The growth will not be unexpected, so existing and future public services, including fire protection, can accommodate the growth and will not adversely impact fire protection. Additionally, the proposed project will be required to comply with all applicable codes for fire safety and emergency access and the project applicant will be required to submit plans to the FFD for review and approval prior to the issuance of permits. The FFD comments are listed below:

1. This tract is within the primary service area of Fire Station 16 and there are no development restrictions related to fire department response.
2. Each parcel is subject to the citywide fire service delivery impact fee.
3. The current tract map is a major revision from the earlier proposed public street sub-division and is now a private street gated community.
4. The proposed street width is only 24 feet and no parking will be allowed on either side throughout the subdivision.
5. All curbs within the tract shall be designated as fire lanes with red curb and "NO PARKING FIRE LANE" in 3" white letters every 50 feet on center. Show those curb designations on the site plan throughout the tract.
6. Install a CVC 22658 fire lane towaway warning sign at each gated entrance/exit.
7. It is common for single family lot private gated sub-divisions to have guest parking stalls provided in several areas within the tract; this plan has no guest parking provided. Lack of available guest parking will increase the likelihood of illegal parking on the street. It is the responsibility of HOA for a subdivision with private streets to enforce no parking in fire lanes. Due to the lack of guest parking, the HOA is required to contract with a licensed towing company to routinely patrol and remove illegally parked vehicles.
8. Both gates shall have Click-2-Enter and Fire X1 bypass hardware. Provide battery backup for electric gates. Place this note on the site plan. Delete the callouts for installation of "Fire KNOX Box";

Be advised that it has been past practice by Planning not to allow public street names for private streets and the Fire Department supports this policy. Designate private street names as approved by Planning.

9. On the CUP site plan, show details of the proposed gates with elevations
10. The curb lines at several intersections identified on the redline require modification of the curb lines to accommodate the inside radius of a fire truck.
11. Be advised that John Martin with Public Utilities has indicated they now require a 30 foot easement for public water mains. Based on the proposed street width, the onsite water infrastructure needs to be private with two master metered 8" connections to existing public water mains. Private metering of each lot is feasible.
12. See redline for private five fire hydrant locations. Install one public hydrant on the N. Blythe frontage.
13. Fire hydrants and all weather fire access shall be provided before delivery of combustible material to the jobsite.

Therefore, the impact is *less than significant*.

**ii. Police protection?**

**Less than Significant Impact:** The City of Fresno Police Department (FPD) provides protection to the project site. The FPD headquarters (Northwest Fresno Police District) is located at 3080 West Shaw Avenue, approximately 2.3 miles from the project site. The 128 new single-family residential homes will increase the demand for police protection services. However, the proposed land use has been planned for by the General Plan to ensure existing public services, including police protection, can accommodate the growth and will not adversely impact police protection. The Fresno Police Department did not provide any comments on the requirement of the construction of new or expanded police facilities. Therefore, the impact is *less than significant*.

**iii. Schools?**

**Less than Significant Impact:** The project site is located within the boundaries of the Central Unified School District. The 128 new single-family residential homes will increase the demand for school services. However, the proposed land use has been planned for by the General Plan to ensure existing public services, including schools, can accommodate the growth and will not be adversely impact schools. In addition to the goals and policies of the City's General Plan, future development is required by state law to pay development impact fees to the school districts at the time of building permit issuance. These impact fees are used by the school districts to maintain existing and develop new facilities, as needed. Therefore, the impact is *less than significant*.

**iv. Parks?**

**Less than Significant Impact:** The 128 new single-family residential homes will result in more use and traffic at existing parks. Parks within a half-mile to one-mile radius that would service the proposed development include Jaswant Singh Khaira Neighborhood Park and Inspiration Park. The project will not lower the existing level of services for parks, and the Project will contribute its fair share to parks facilities through a combination of park development, as well as in-lieu fees. In addition, approximately 8,332 SF of open space will be developed within the residential subdivision, in compliance with Fresno Municipal Code Section 12-4.705 Developer Dedication or Construction of Facilities. The new open space will alleviate some traffic to existing parks. Therefore, the impact is *less than significant*.

**v. Other public facilities?**

**Less than Significant Impact:** The Project will be required to pay development impact fees to offset increased demand for public services related to transportation, water, wastewater, groundwater recharge, storm drainage, and general governmental services.

The following Sewer Connection Charges are due and shall be paid for the Project:

1. Lateral Sewer Charge.
2. Oversize Sewer Charge: Area #22.
3. Wastewater Facility Sewer Charge (Residential).
4. Trunk Sewer Service Charge: Cornelia.

Fees for transportation, water, wastewater, and general government are based on building square footage and will be calculated prior to the issuance of building permits. Fees for groundwater recharge and storm drainage are based on site acreage.

While the payment of development fees could result in the construction of new or altered public service facilities, no specific projects have been identified at this time. As new or expanded public service facilities become necessary, construction or expansion projects will be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant*.

In conclusion, the Project will not result in any impacts to public services beyond those analyzed in the City of Fresno General Plan PEIR.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVI. RECREATION</b> - Would the project:				
a) 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?			X	
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?				X

## DISCUSSION

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

**Less than Significant Impact:** The Project will result in an increase of use and traffic of existing parks and other recreational facilities. However, the Project will contribute its fair share to parks facilities through a combination of park development, as well as in-lieu fees, which will be used to support the maintenance of existing parks and other recreational facilities as identified in Impact XV a) iv. (Public Services) above, therefore, the impact is *less than significant*.

- 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?**

**No Impact:** The Project will develop approximately 8,332 SF of open space, which will be located within the residential subdivision in compliance with Fresno Municipal Code Section 12-4.705 Developer Dedication or Construction of Facilities. However, the development of the open space will not have an adverse effect on the environment since it will establish impervious surfaces to minimize runoff and provide recreational

opportunities for all community members. There are no plans for construction on the open space area at this time. Therefore, there is *no impact*.

In conclusion, the Project will not result in any impacts to parks and recreation beyond those analyzed in City of Fresno General Plan PEIR.

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

## DISCUSSION

### a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

**No Impact:** Based on the *Fresno County SB 743 Implementation Regional Guidelines* (July 2020), the project site is considered one of the land use developments that are presumed to have a less than significant impact because of the criteria that the project:

1. Generates fewer than 5000 average daily trips (ADT). According to the Institute of Transportation Engineers, Trip Generation Manual, 11<sup>th</sup> Edition, single family detached housing generates 11.24 ADT. For 128 units, this totals approximately 1,439 trips.
2. A residential project that is located in areas with low VMT and incorporates similar features (i.e., density, mix of uses, transit accessibility).

In addition, the Project's proposed land use has been planned for regarding its potential impact on the circulation system by the City of Fresno General Plan.

**City of Fresno Standard Specifications:** The City of Fresno Standard Specifications are developed and enforced by the City of Fresno Public Works Department to guide the development and maintenance of streets within the city. The cross-section drawings contained in the City's Standard Specifications dictate the development of roads within the City.

**City of Fresno General Plan:** The Transportation and Mobility Element of the City of Fresno General Plan provides tiered impact criteria based on a project's location within the City's Sphere of Influence. The proposed project site is located within Traffic Impact Zone III (TIZ-III). TIZ-III generally represents areas near or outside the City Limits but within the SOI as of December 31, 2012. Maintain a peak hour LOS standard of D or better for all intersections and roadway segments. The general plan states that a TIS will be required for all development projected to generate 100 or more peak hour new vehicle trips.

**City of Fresno Active Transportation Plan:** The City of Fresno Active Transportation Plan (ATP) adopted March 2017, updates and supersedes the City of Fresno 2010 Bicycle, Pedestrian, and Trails Master Plan (BMP). The ATP outlines the vision to provide human-powered travel including walking, bicycling, and wheelchair use. The plan aims to improve the accessibility and connectivity of bicycle and pedestrian network to increase the number of people to travel active transportation. The goals identified in the ATP are:

- Equitably improve the safety and perceived safety of walking and bicycling in Fresno
- Increase walking and bicycling trips in Fresno by creating user-friendly facilities
- Improve the geographic equity of access to walking and bicycling facilities in Fresno
- Fill key gaps in Fresno's walking and bicycling networks

The Project does not conflict with any other program plan, ordinance or policy regarding circulation system and therefore, there is *no impact*.

**b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?**

**Less than Significant Impact:** Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.



The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds, pursuant to Senate Bill 743 to be effective of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

The City of Fresno VMT Thresholds adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis. The City of Fresno VMT Thresholds Section 3.0 regarding Project Screening discusses a variety of projects that may be screened out of a VMT analysis including specific development and transportation projects. For development projects, conditions may exist that would presume that a development project has a less than significant impact. These may be size, location, proximity to transit, or trip-making potential. For transportation projects, the primary attribute to consider with transportation projects is the potential to increase vehicle travel, sometimes referred to as "induced travel."

The proposed project is eligible to screen out because the Project is estimated to have a less than significant transportation impact based on VMT compared to existing conditions. Based on the Fresno COG VMT map screening tool, the project site is located within the Low VMT generator category, which indicates the average VMT is estimated to be more than 13% lower than the regional average. The average VMT for the project site is estimated at 12.73. The average VMT for Fresno County is 16.1.

Based on the 13% threshold, VMT for a project cannot exceed 14.01. With a VMT of 12.73, the project avoids requiring a VMT analysis because projects located in areas of low VMT tend to exhibit a similarly low VMT. The proposed project is eligible to screen out because it is located in a low VMT zone, as designated by the Fresno COG screening map and Figure 6 of the City of Fresno CEQA Guidelines for VMT Thresholds. Therefore, the Project is consistent with CEQA Guidelines section 15064.3(b) and the VMT impact is less than significant.

In conclusion, the Project will result in a less than significant VMT impact and is consistent with CEQA Guidelines Section 15064.3(b).

**c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**No Impact:** The Project does not propose any hazardous geometric design features and includes a new vehicle access point via West Dayton Avenue. The new vehicle access point will not create sharp curves or dangerous intersections with the existing roadways. The gated entrance has been reviewed by the City Engineer and Fire Department and will not cause an impact. There will be sufficient turnaround if someone cannot get into the gate. El Capitan Avenue, where the gated entrance is located, will be widened to 40' around the gate to accommodate a potential vehicle turnaround. The Project is consistent with the surrounding residential land uses and has been planned for in the City of Fresno General Plan. Therefore, there is *no impact*.

**d) Would the project result in inadequate emergency access?**

**No Impact:** All proposed street improvements will be installed in conformance with the City of Fresno Public Works Standards and Specifications to ensure adequate emergency access. Following review from the City Fire Department, the Project will include a fire access gate onto Blythe Avenue. There is *no impact*.

In conclusion, the Project will not result in any transportation impacts beyond those analyzed in the City of Fresno General Plan PEIR.

<b>ENVIRONMENTAL ISSUES</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XVII. TRIBAL CULTURAL RESOURCES</b> – Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or,		X		
ii) 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 PRC section 5024.1. In applying the criteria set forth in subdivision (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

## DISCUSSION

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

- i. **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), or**

**Less Than Significant Impact:** The project site is currently vacant and does not have any existing structures or notable landscape features. There are no recorded cultural resources within the project area based on a Cultural Resources Record Search. For the full results of the Cultural Resources Record Search, see Section 5, Cultural Resources. Therefore, it is unlikely that the Project will cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. However, the presence of remains or unanticipated cultural resources under the ground surface is possible. As such, the Project will implement Mitigation Measures CUL-1 and CUL-3 (listed below), which are identified in the City of Fresno General Plan PEIR, Section 5.5.5, Impact Analysis, Mitigation Measures, and Level of Significance After Mitigation for Cultural Resources. These mitigation measures establish guidelines for preserving cultural resources.

The implementation of Mitigation Measures CUL-1.1 and CUL-3 (listed below) will minimize any potential for substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. Therefore, the impact will be *less than significant with mitigation*.

- ii. **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 © of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivisi©(c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

**Less Than Significant Impact:** The lead agency, the City of Fresno, has not determined there to be any known tribal cultural resources located within the project area. In addition, there are not believed to be any paleontological resources or human remains buried within the project area's vicinity. However, if resources were found to be significant pursuant to criteria set forth in subdivi©on (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American Tribe. The implementation of Mitigation Measures CUL-1.1 and CUL-3 (listed below) will ensure that any impacts resulting from the Project will remain *less than significant with mitigation*.

### **Mitigation Measures**

The proposed project shall implement and incorporate the tribal cultural resource related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 2024.

- **Mitigation Measure CUL-1.1:** If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.
- 
- **Mitigation Measure CUL-3:** In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the de'cendants' preferences for treatment.

In conclusion, the Project will not result in any impacts to tribal cultural resources beyond those analyzed in City of Fresno General Plan PEIR.

<b>ENVIRONMENTAL ISSUES</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>				
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 effect?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the waste water 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?			X	
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

## DISCUSSION

- 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?**

Information about utilities in this section was provided in the Conditions of Approval Letter from the Fresno Department of Public Utilities.

**Less Than Significant Impact:** The Project will require the extension of existing utility services into the project site. The nearest water mains to serve the Project are a 14-inch water main located in North Blythe Avenue and an 8-inch water main located in West Dayton Avenue. Water facilities are available to provide service to the Project subject to the following requirements:

1. Water mains (including installation of City fire hydrants) shall be extended within the proposed tract to provide service to each lot.
2. Installation of a new water service(s) and meter(s) shall be required.
3. The applicant shall be financially responsible for the abandonment of any unused water services previously installed to the property, if any.
4. Two independent sources of water, meeting Federal and State Drinking Water Act Standards, are required to serve the tract including any subsequent phases thereof. The two-source requirement may be accomplished through any combination of water main extensions, construction of supply wells, or other acceptable sources of water supply approved by the Department of Public Utilities Director or designee.
5. Destroy any existing on-site well(s) in compliance with the State of California Well Standards, Bulletins 74-81 and 74-90, or current revisions, issued by California Department of Water Resources, Fresno County standards, and City of Fresno standards. The applicant shall comply with Fresno Municipal Code (FMC) Section 6-518, as may be amended from time to time.

This is not anticipated to cause a significant environmental effect because extension/relocation would occur within the right-of-way prior to street construction to minimize environmental impacts. In addition, the proposed land use and associated utility services are consistent with and planned for by the City of Fresno General Plan, which identifies the project site as Residential – Medium Density.

It is not anticipated that the Project will result in the relocation or construction of new or expanded wastewater treatment facilities, power plants, natural gas extraction facilities or telecommunication facilities. In the event that any of these facilities become required, they will be required to serve more than just the Project and will be subject

to separate environmental review and approval. Therefore, the impact is less than significant.

**b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

**Less Than Significant Impact:** While the Project will increase water demand, the proposed land use and associated water demand are consistent with and planned for by the City of Fresno General Plan, which identifies the project site as Residential – Medium Density. As such, the Project would not affect water supplies beyond what has already been analyzed in the City of Fresno General Plan PEIR and therefore, the impact is less than significant.

**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?**

**Less Than Significant Impact:** While the Project will increase demand for wastewater services, the proposed land use and associated wastewater demand are consistent with and planned for by the City of Fresno General Plan, which identifies the project site as Residential – Medium Density. The nearest sanitary sewer main to serve the Project is a 15-inch sewer main located in West Dakota Avenue. Sanitary sewer facilities are available to provide service to the Project subject to the following requirements:

1. A preliminary sewer design layout shall be prepared by the applicant's engineer and submitted to the Department of Public Utilities for review and conceptual approval prior to submittal for City review or acceptance of the final map(s) and engineered plan and profile improvement drawing(s).
2. Construct an 8-inch sanitary sewer main (including sewer service branches to adjacent properties) in North Blythe Avenue from the existing 15-inch sewer main in West Dakota Avenue located north of the Project to the south property line of said Project.
3. All sanitary sewer mains shall be extended within the Project to provide service to each lot.
4. Installation of separate sewer service branch(es) to each lot shall be required.
5. All existing on-site private septic systems (including septic tanks) shall be destroyed and abandoned in compliance with the State of California standards, Fresno County standards, and City of Fresno standards, as may be amended from time to time. All sewer connections and sewer main extensions shall comply with FMC Section 6- 303(a), as may be amended from time to time.
6. The applicant shall be financially responsible for abandonment of any unused sewer services previously installed to the property.



As such, the Project would not affect wastewater capacities beyond what has already been analyzed in the City of Fresno General Plan PEIR and therefore, the impact is less than significant.

**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?**

**Less Than Significant Impact:** Solid waste collection service will be provided by the City of Fresno and waste disposal will be provided by the County. Solid waste is anticipated because of project implementation; however, the project does not include any components that would generate excessive waste and the existing landfill (American Avenue Disposal Site) has sufficient permitted capacity to accommodate the project's solid waste disposal needs. According to CalRecycle's Solid Waste Information System (SWIS), American Avenue Disposal Site has a daily capacity of 2,200 tons of solid waste (803,000 tons per year). However, the American Avenue Disposal Site has an estimated closure date of August 31, 2031.

Following the closure, other landfills within Fresno County will be used. This includes the Clovis Landfill, with a maximum remaining permitted capacity of 7,740,000 cubic yards, a maximum permitted throughput of 2,000 tons per day (730,000 tons per year), and an estimated closure date of April 30, 2047.

Section 8.2, Waste by Land Use, of the CalEEMod Report conducted for the project found that operation of 128 single-family homes will produce 137.71 tons of solid waste per year. Therefore, the proposed project will take up 0.017% of the American Avenue landfill's yearly capacity, and 0.019% of the Clovis landfill's yearly capacity. While solid waste will result from project implementation, the impact is less than significant.

**e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**No Impact:** The proposed project will comply with all applicable federal, state, and local regulations pertaining to the disposal of solid waste, including recycling. Therefore, the proposed project would have no impact on solid waste regulations. Furthermore, project construction and operational activities that generate solid waste would be handled, transported, and disposed of in accordance with AB 939 and CALGreen regulations related to solid waste. In compliance with CALGreen Section 4.408, the project will undertake construction waste management practices, which include recycling and salvaging a minimum of 65 percent of nonhazardous construction and demolition waste. Exceptions are made for excavated soil and land clearing debris. The enforcing agency may identify alternate waste reduction requirements in cases where diversion facilities necessary for compliance are not

reasonably available near the job site. To adhere to these requirements, the project will submit a construction waste management plan signed by the owner, which will identify the materials to be diverted from disposal through recycling, reuse, or salvage, and specify whether materials will be source-separated or bulk mixed. Documentation will be maintained to demonstrate compliance with these regulations. Therefore, the proposed project would have *no impact* on solid waste regulations.

The proposed project aligns with the City of Fresno General Plan and Greenhouse Gas Reduction Plan Update includes the following policies related to solid waste management:

- Policy PU-9-a: New Techniques. Continue to collaborate with affected stakeholders and partners to identify and support programs and new techniques of solid waste disposal, such as recycling, composting, waste to energy technology, and waste separation, to reduce the volume and toxicity of solid wastes that must be sent to landfill facilities.
- Policy PU-9-b: Compliance with State Law. Continue to pursue programs to maintain conformance with the Solid Waste Management Act of 1989 or as otherwise required by law and mandated diversion goals.
- Policy RC-11-a: Waste Reduction Strategies. Maintain current targets for recycling and re-use of all types of waste material in the city and enhance waste and wastewater management practices to reduce natural resource consumption, including the following measures:
  - Continue to require recyclable material collection and storage areas in all residential development.
  - Establish recycling collection and storage area standards for commercial and industrial facilities to size the recycling areas according to the anticipated types and amounts of recyclable material generated.
  - Provide educational materials to residents on how and what to recycle and how to dispose of hazardous waste.
  - Provide recycling canisters and collection in public areas where trash cans are also provided.
  - Institute a program to evaluate major waste generators and identify recycling opportunities for their facilities and operations.
  - Continue to partner with the California Integrated Waste Management Board on waste diversion and recycling programs and the CalMax (California Materials Exchange) program.
  - Evaluate the feasibility of a residential, restaurant and institutional food waste segregation and recycling program, to reduce the amount of organic material sent to landfill and minimize the emissions generated by decomposing organic material.
  - Evaluate the feasibility of “carbon foot printing” for the City’s wastewater treatment facilities, biomass and composting operations, solid waste collection and recycling programs.

- Expand yard waste collection to divert compostable waste from landfills.
  - Study the feasibility and cost-benefit analysis of a municipal composting program to collect and compost food and yard waste, including institutional food and yard waste, using the resulting compost matter for City park and median maintenance.
- Policy RC-11-b: Zero Waste Strategy. Create a strategic and operations plan for fulfilling the City Council resolution committing the City to a Zero Waste goal.
- Policy RC-4-i: Methane Capture. Continue to pursue opportunities to reduce air pollution by using methane gas from the old City landfill and the City's wastewater treatment process.

In conclusion, the Project will not result in any impacts to utilities and service systems beyond those analyzed in the City of Fresno General Plan PEIR.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XX. WILDFIRE</b> – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
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?				X
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?			X	
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?				X

## DISCUSSION

### a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

**No Impact:** The project would not substantially impair access to the existing roadway network. There would be convenient and safe vehicular and pedestrian circulation provided within the project site and connecting offsite. The Project has been reviewed

by the City of Fresno Fire Chief and has determined it does not impair emergency response or emergency evacuation. In addition, the project site is not located within a State Responsibility Area (SRA) or Very High Fire Hazard Severity Zone (FHSZ). Therefore, there is *no impact*.

- b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

**No Impact:** The Project is located on a relatively flat parcel in an urban area, which is considered to be at little risk of fire. In addition, the project site is not located within an SRA or a Very High FHSZ. Therefore, there is *no impact*.

- c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

**Less than Significant Impact:** Construction will involve adding new local residential streets as well as new and relocated utilities, including emergency water sources, power lines and other utilities. However, all improvements will be subject to the City standards and the approval of the Fire Chief to ensure they will not exacerbate fire risk. Therefore, the risk is *less than significant*.

- d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes?**

**No Impact:** The project site is relatively flat and not designated as a FHSZ, therefore it is unlikely to be susceptible to downslope/downstream flooding or landslides as a result of runoff, post-fire instability, or drainage change. There is *no impact*.

In conclusion, the Project will not result in any wildfire impacts beyond those analyzed in City of Fresno General Plan PEIR.

<b>ENVIRONMENTAL ISSUES</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XIX. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a) Does the project have the potential to 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, 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?		X		
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

## **DISCUSSION**

- a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**Less than Significant Impact:** The Project would not be a detriment to the environment in and around the Project site. The Project is vacant, has been disturbed by agricultural uses, no wildlife species exist on the site, and it is clear of vegetation. The Project does not have the potential to degrade the quality of the environment, reduce the habitat of wildlife species, and will not threaten any plant communities. In addition, the project was no potential to eliminate important examples of major periods in history. With implementation of applicable City of Fresno PEIR mitigation measures, impacts are considered to be *less than significant with mitigation*.

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

**Less than Significant Impact:** CEQA Guidelines Section 15064(h) states that the lead agency, the City of Fresno, shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc.). Therefore, the impacts are *less than significant*.

- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less Than Significant Impact:** The analyses of environmental issues contained in this Initial Study / Mitigated Negative Declaration indicate that the Project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to less than significant, therefore, impacts are *less than significant*.

## **Mitigation Monitoring and Reporting Program (MMRP) for the Vesting Tentative Tract Map No. 6192 and Planned Development Permit Application No. P23-03377**

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed Tentative Tract Map No. 6192 residential development. The MMRP, which is found in Table A of this section, lists mitigation measures recommended in the IS/MND for the proposed project and identifies mitigation monitoring requirements.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of an MMRP when mitigation measures are required to avoid significant impacts. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process. The MMRP is intended to ensure compliance during implementation of the project.

The MMRP is organized in a matrix format. The first column identifies the mitigation measure. The second column, entitled "Timing for Mitigation Measure," refers to the implementation and schedule of mitigation measures. The third column, entitled "Mitigation Responsibility," refers to the party responsible for implementing the mitigation measure. The fourth column, entitled "Monitoring/Reporting Agency," refers to the agency responsible for oversight or ensuring that the mitigation measure is implemented. The fifth column, entitled "Verification," will be initialed and dated by the individual designated to verify adherence to the project specific mitigation, when the mitigation measure is completed.



**Table A: Mitigation Monitoring and Reporting Program**

<b>MITIGATION MEASURE</b>	<b>Timing for Mitigation Measure</b>	<b>Mitigation Responsibility</b>	<b>Monitoring/ Reporting Agency</b>	<b>Verification (Initials and Date)</b>
<b>Aesthetics</b>				
AES-4.1: Lighting for Street and Parking Areas	During construction and operation	Install shields on light fixtures to direct light to roadway surfaces and parking areas, and away from adjacent light-sensitive land uses.	City of Fresno Planning and Development Department	
AES-4.2: Lighting for Public Facilities	During construction and operation	Use low-intensity light fixtures and shields to minimize spillover light onto adjacent properties.	City of Fresno Planning and Development Department	
AES-4.3: Lighting for Non-Residential Uses	During construction and operation	Provide shields on light fixtures and orient the lighting system away from adjacent properties; use low-intensity light fixtures if excessive spillover light will occur.	City of Fresno Planning and Development Department	
AES-4.4: Signage Lighting	During construction and operation	Ensure lighting systems for freestanding signs do not exceed 100 foot-Lamberts (FT-L) adjacent to streets with average light intensity <2.0 horizontal footcandles and 500 FT-L adjacent to streets with average light intensity ≥2.0 horizontal footcandles.	City of Fresno Planning and Development Department	
AES-4.5: Use of Non-Reflective Materials	During construction	Use non-reflective materials on building facades.	City of Fresno Planning and Development Department	
<b>Biological Resources</b>				
BIO-1.1: Avoidance of Special-Status Species	Prior to and during construction	Determine presence/absence of special-status species prior to construction and incorporate avoidance and minimization measures.	Qualified Biologist and City of Fresno Planning and Development Department	
BIO-1.2: Avoidance of Direct or Incidental Take of Listed Species	Prior to and during construction	Consult with resource agencies and obtain necessary permits if direct or incidental take of listed species will occur.	Qualified Biologist and City of Fresno Planning and Development Department	
BIO-1.3: Preservation or Restoration of Habitat	Prior to construction	Preserve on-site habitat, restore similar habitat, or purchase off-site credits from an approved mitigation bank.	Qualified Biologist and City of Fresno Planning and Development Department	
BIO-1.4: Avoidance of Nesting Season for Birds	Prior to and during construction (February to August)	Conduct pre-construction surveys to determine nesting activity and establish suitable buffers if active nests are found.	Qualified Biologist and City of Fresno Planning and Development Department	

BIO-2.1: Pre-Construction Clearance Survey for Riparian Habitat	Prior to construction	Conduct surveys to determine the presence of riparian habitat and implement compensatory mitigation if necessary.	Qualified Biologist and City of Fresno Planning and Development Department	
BIO-2.2: Consultation with Agencies for Streambed or Waterway Impacts	Prior to construction	Consult with CDFW and/or USACE to develop mitigation strategies and obtain necessary permits.	Qualified Biologist and City of Fresno Planning and Development Department	
BIO-2.3: Addressing Impacts to Special-Status Species in Riparian Habitat	Prior to construction	Conduct pre-construction surveys and consult with resource agencies to develop appropriate mitigation measures.	Qualified Biologist and City of Fresno Planning and Development Department	
<b>Cultural Resources</b>				
CUL-1: Protection of Discovered Historical Resources	During construction	Halt construction if historical resources are found and consult a qualified specialist to determine protection measures.	Qualified Historical Resources Specialist and City of Fresno Planning and Development Department	
CUL-3: Treatment of Discovered Human Remains	During construction	Halt construction if human remains are found and follow Health and Safety Code Section 7050.5 procedures.	County Coroner and City of Fresno Planning and Development Department	

# Appendix A

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## Site Plan



## Appendix B

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### Cultural Resources Record Search



**To:** Roxanne Lee  
4-creeks  
324 S. Santa Fe, Ste A  
Visalia, CA 93292

**Record Search 22-078**

**Date:** February 21, 2022

**Re:** Tract Map 6192, located at N. Blythe and W. Dayton Ave., Fresno

**County:** Fresno

**Map(s):** Fresno 7.5'

### **CULTURAL RESOURCES RECORDS SEARCH**

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

### **PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-QUARTER MILE RADIUS**

According to the information in our files, there has been no previous cultural resource studies in the project area. There have been four studies conducted within the one-half mile radius: FR-00191, 00271, 00287, & 02029.

**KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-QUARTER MILE RADIUS**

There are no recorded resources within the project area. There is one recorded resource within the one-half mile radius: P-10-005392. This is a historic property resource.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

**COMMENTS AND RECOMMENDATIONS**

We understand this project is proposing to build an 86-lot subdivision, with an average lot area of approximately 5,692 sf. Further we understand that the project site is located on vacant land with no existing structures. Because none of this project area has been previously studied for cultural resources, it is unknown if any are present. As such, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at [www.chrisinfo.org](http://www.chrisinfo.org).

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:



Jeremy E David, Assistant Coordinator

**Date:** February 21, 2022

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

# Appendix C

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## CalEEMod Report



## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****Tract 6192 - Blythe and Dayton****San Joaquin Valley Air Basin, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	128.00	Dwelling Unit	15.89	230,400.00	366

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	45
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas and Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	203.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - The parcel is 15.89 acres and is zoned medium-density.

Construction Phase -

Fleet Mix - Residential fleet mix from: <http://www.valleyair.org/isr/Documents/Residential-Fleet-Mix.pdf>

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	0.02
tblFleetMix	LDA	0.52	0.52
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.4230e-003	9.0000e-004

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	3.3950e-003	2.2000e-003
tblFleetMix	MHD	0.01	7.6000e-003
tblFleetMix	OBUS	6.4900e-004	0.00
tblFleetMix	SBUS	1.4390e-003	1.0000e-004
tblFleetMix	UBUS	3.1300e-004	4.3000e-003
tblLandUse	LotAcreage	41.56	15.89
tblWoodstoves	NumberCatalytic	15.89	0.00
tblWoodstoves	NumberNoncatalytic	15.89	0.00

**2.0 Emissions Summary**

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## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****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					
2024	0.1955	1.7824	1.9441	3.8400e-003	0.2772	0.0770	0.3542	0.1164	0.0719	0.1882	0.0000	336.7317	336.7317	0.0777	3.9900e-003	339.8621
2025	2.2764	0.9927	1.3419	2.5000e-003	0.0332	0.0410	0.0742	8.9800e-003	0.0385	0.0475	0.0000	218.8003	218.8003	0.0443	3.2000e-003	220.8618
<b>Maximum</b>	<b>2.2764</b>	<b>1.7824</b>	<b>1.9441</b>	<b>3.8400e-003</b>	<b>0.2772</b>	<b>0.0770</b>	<b>0.3542</b>	<b>0.1164</b>	<b>0.0719</b>	<b>0.1882</b>	<b>0.0000</b>	<b>336.7317</b>	<b>336.7317</b>	<b>0.0777</b>	<b>3.9900e-003</b>	<b>339.8621</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1955	1.7824	1.9441	3.8400e-003	0.2772	0.0770	0.3542	0.1164	0.0719	0.1882	0.0000	336.7313	336.7313	0.0777	3.9900e-003	339.8617
2025	2.2764	0.9927	1.3419	2.5000e-003	0.0332	0.0410	0.0742	8.9800e-003	0.0385	0.0475	0.0000	218.8001	218.8001	0.0443	3.2000e-003	220.8616
<b>Maximum</b>	<b>2.2764</b>	<b>1.7824</b>	<b>1.9441</b>	<b>3.8400e-003</b>	<b>0.2772</b>	<b>0.0770</b>	<b>0.3542</b>	<b>0.1164</b>	<b>0.0719</b>	<b>0.1882</b>	<b>0.0000</b>	<b>336.7313</b>	<b>336.7313</b>	<b>0.0777</b>	<b>3.9900e-003</b>	<b>339.8617</b>

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	2-22-2024	5-21-2024	0.7188	0.7188
2	5-22-2024	8-21-2024	0.5177	0.5177
3	8-22-2024	11-21-2024	0.5184	0.5184
4	11-22-2024	2-21-2025	0.4985	0.4985
5	2-22-2025	5-21-2025	0.4664	0.4664
6	5-22-2025	8-21-2025	1.5179	1.5179
7	8-22-2025	9-30-2025	1.0103	1.0103
		Highest	1.5179	1.5179

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****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	1.1502	0.0588	0.9699	3.6000e-004		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003	0.0000	57.0030	57.0030	2.5500e-003	1.0200e-003	57.3697
Energy	0.0166	0.1418	0.0603	9.0000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	258.6261	258.6261	0.0184	4.8600e-003	260.5356
Mobile	0.3423	0.6453	4.1361	0.0118	1.2884	8.9600e-003	1.2973	0.3433	8.3600e-003	0.3517	0.0000	1,128.8601	1,128.8601	0.0739	0.0530	1,146.4918
Waste						0.0000	0.0000		0.0000	0.0000	27.9539	0.0000	27.9539	1.6520	0.0000	69.2546
Water						0.0000	0.0000		0.0000	0.0000	2.6458	5.8779	8.5237	0.2727	6.5300e-003	17.2877
<b>Total</b>	<b>1.5091</b>	<b>0.8459</b>	<b>5.1663</b>	<b>0.0130</b>	<b>1.2884</b>	<b>0.0296</b>	<b>1.3179</b>	<b>0.3433</b>	<b>0.0290</b>	<b>0.3723</b>	<b>30.5997</b>	<b>1,450.3670</b>	<b>1,480.9667</b>	<b>2.0196</b>	<b>0.0654</b>	<b>1,550.9393</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****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	1.1502	0.0588	0.9699	3.6000e-004		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003	0.0000	57.0030	57.0030	2.5500e-003	1.0200e-003	57.3697
Energy	0.0166	0.1418	0.0603	9.0000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	258.6261	258.6261	0.0184	4.8600e-003	260.5356
Mobile	0.3423	0.6453	4.1361	0.0118	1.2884	8.9600e-003	1.2973	0.3433	8.3600e-003	0.3517	0.0000	1,128.8601	1,128.8601	0.0739	0.0530	1,146.4918
Waste						0.0000	0.0000		0.0000	0.0000	27.9539	0.0000	27.9539	1.6520	0.0000	69.2546
Water						0.0000	0.0000		0.0000	0.0000	2.6458	5.8779	8.5237	0.2727	6.5300e-003	17.2877
<b>Total</b>	<b>1.5091</b>	<b>0.8459</b>	<b>5.1663</b>	<b>0.0130</b>	<b>1.2884</b>	<b>0.0296</b>	<b>1.3179</b>	<b>0.3433</b>	<b>0.0290</b>	<b>0.3723</b>	<b>30.5997</b>	<b>1,450.3670</b>	<b>1,480.9667</b>	<b>2.0196</b>	<b>0.0654</b>	<b>1,550.9393</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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/21/2024	4/3/2024	5	10	
2	Grading	Grading	4/4/2024	5/15/2024	5	30	
3	Building Construction	Building Construction	5/16/2024	7/9/2025	5	300	

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

4	Paving	Paving	7/10/2025	8/6/2025	5	20
5	Architectural Coating	Architectural Coating	8/7/2025	9/3/2025	5	20

**Acres of Grading (Site Preparation Phase): 15****Acres of Grading (Grading Phase): 90****Acres of Paving: 0****Residential Indoor: 466,560; Residential Outdoor: 155,520; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
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
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

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	46.00	14.00	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	9.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 Site Preparation - 2024****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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
<b>Total</b>	<b>0.0133</b>	<b>0.1359</b>	<b>0.0917</b>	<b>1.9000e-004</b>	<b>0.0983</b>	<b>6.1500e-003</b>	<b>0.1044</b>	<b>0.0505</b>	<b>5.6600e-003</b>	<b>0.0562</b>	<b>0.0000</b>	<b>16.7285</b>	<b>16.7285</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8638</b>



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.2 Site Preparation - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0700e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5681	0.5681	2.0000e-005	2.0000e-005	0.5731
<b>Total</b>	<b>2.6000e-004</b>	<b>1.7000e-004</b>	<b>2.0700e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>0.0000</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5681</b>	<b>0.5681</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.5731</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6500e-003	5.6500e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
<b>Total</b>	<b>0.0133</b>	<b>0.1359</b>	<b>0.0917</b>	<b>1.9000e-004</b>	<b>0.0983</b>	<b>6.1500e-003</b>	<b>0.1044</b>	<b>0.0505</b>	<b>5.6500e-003</b>	<b>0.0562</b>	<b>0.0000</b>	<b>16.7285</b>	<b>16.7285</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8638</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.2 Site Preparation - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0700e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5681	0.5681	2.0000e-005	2.0000e-005	0.5731
<b>Total</b>	<b>2.6000e-004</b>	<b>1.7000e-004</b>	<b>2.0700e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>0.0000</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5681</b>	<b>0.5681</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.5731</b>

**3.3 Grading - 2024****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					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e-004		0.0200	0.0200		0.0184	0.0184	0.0000	81.7793	81.7793	0.0265	0.0000	82.4405
<b>Total</b>	<b>0.0483</b>	<b>0.4857</b>	<b>0.4158</b>	<b>9.3000e-004</b>	<b>0.1381</b>	<b>0.0200</b>	<b>0.1581</b>	<b>0.0548</b>	<b>0.0184</b>	<b>0.0732</b>	<b>0.0000</b>	<b>81.7793</b>	<b>81.7793</b>	<b>0.0265</b>	<b>0.0000</b>	<b>82.4405</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.3 Grading - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	5.6000e-004	6.9000e-003	2.0000e-005	2.4000e-003	1.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8935	1.8935	5.0000e-005	5.0000e-005	1.9104
<b>Total</b>	<b>8.7000e-004</b>	<b>5.6000e-004</b>	<b>6.9000e-003</b>	<b>2.0000e-005</b>	<b>2.4000e-003</b>	<b>1.0000e-005</b>	<b>2.4100e-003</b>	<b>6.4000e-004</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.8935</b>	<b>1.8935</b>	<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>1.9104</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e-004		0.0200	0.0200		0.0184	0.0184	0.0000	81.7792	81.7792	0.0265	0.0000	82.4404
<b>Total</b>	<b>0.0483</b>	<b>0.4857</b>	<b>0.4158</b>	<b>9.3000e-004</b>	<b>0.1381</b>	<b>0.0200</b>	<b>0.1581</b>	<b>0.0548</b>	<b>0.0184</b>	<b>0.0732</b>	<b>0.0000</b>	<b>81.7792</b>	<b>81.7792</b>	<b>0.0265</b>	<b>0.0000</b>	<b>82.4404</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.3 Grading - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	5.6000e-004	6.9000e-003	2.0000e-005	2.4000e-003	1.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8935	1.8935	5.0000e-005	5.0000e-005	1.9104
<b>Total</b>	<b>8.7000e-004</b>	<b>5.6000e-004</b>	<b>6.9000e-003</b>	<b>2.0000e-005</b>	<b>2.4000e-003</b>	<b>1.0000e-005</b>	<b>2.4100e-003</b>	<b>6.4000e-004</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.8935</b>	<b>1.8935</b>	<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>1.9104</b>

**3.4 Building Construction - 2024****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	0.1207	1.1024	1.3257	2.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	190.1163	190.1163	0.0450	0.0000	191.2402
<b>Total</b>	<b>0.1207</b>	<b>1.1024</b>	<b>1.3257</b>	<b>2.2100e-003</b>		<b>0.0503</b>	<b>0.0503</b>		<b>0.0473</b>	<b>0.0473</b>	<b>0.0000</b>	<b>190.1163</b>	<b>190.1163</b>	<b>0.0450</b>	<b>0.0000</b>	<b>191.2402</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.4 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2300e-003	0.0508	0.0152	2.3000e-004	7.6100e-003	3.3000e-004	7.9400e-003	2.2000e-003	3.2000e-004	2.5200e-003	0.0000	21.8382	21.8382	9.0000e-005	3.2700e-003	22.8136
Worker	0.0109	7.0000e-003	0.0868	2.5000e-004	0.0302	1.5000e-004	0.0303	8.0200e-003	1.4000e-004	8.1500e-003	0.0000	23.8079	23.8079	6.8000e-004	6.6000e-004	24.0204
<b>Total</b>	<b>0.0122</b>	<b>0.0578</b>	<b>0.1019</b>	<b>4.8000e-004</b>	<b>0.0378</b>	<b>4.8000e-004</b>	<b>0.0383</b>	<b>0.0102</b>	<b>4.6000e-004</b>	<b>0.0107</b>	<b>0.0000</b>	<b>45.6460</b>	<b>45.6460</b>	<b>7.7000e-004</b>	<b>3.9300e-003</b>	<b>46.8340</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1207	1.1024	1.3257	2.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	190.1160	190.1160	0.0450	0.0000	191.2400
<b>Total</b>	<b>0.1207</b>	<b>1.1024</b>	<b>1.3257</b>	<b>2.2100e-003</b>		<b>0.0503</b>	<b>0.0503</b>		<b>0.0473</b>	<b>0.0473</b>	<b>0.0000</b>	<b>190.1160</b>	<b>190.1160</b>	<b>0.0450</b>	<b>0.0000</b>	<b>191.2400</b>

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.4 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2300e-003	0.0508	0.0152	2.3000e-004	7.6100e-003	3.3000e-004	7.9400e-003	2.2000e-003	3.2000e-004	2.5200e-003	0.0000	21.8382	21.8382	9.0000e-005	3.2700e-003	22.8136
Worker	0.0109	7.0000e-003	0.0868	2.5000e-004	0.0302	1.5000e-004	0.0303	8.0200e-003	1.4000e-004	8.1500e-003	0.0000	23.8079	23.8079	6.8000e-004	6.6000e-004	24.0204
<b>Total</b>	<b>0.0122</b>	<b>0.0578</b>	<b>0.1019</b>	<b>4.8000e-004</b>	<b>0.0378</b>	<b>4.8000e-004</b>	<b>0.0383</b>	<b>0.0102</b>	<b>4.6000e-004</b>	<b>0.0107</b>	<b>0.0000</b>	<b>45.6460</b>	<b>45.6460</b>	<b>7.7000e-004</b>	<b>3.9300e-003</b>	<b>46.8340</b>

**3.4 Building Construction - 2025****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	0.0930	0.8479	1.0938	1.8300e-003		0.0359	0.0359		0.0338	0.0338	0.0000	157.7052	157.7052	0.0371	0.0000	158.6320
<b>Total</b>	<b>0.0930</b>	<b>0.8479</b>	<b>1.0938</b>	<b>1.8300e-003</b>		<b>0.0359</b>	<b>0.0359</b>		<b>0.0338</b>	<b>0.0338</b>	<b>0.0000</b>	<b>157.7052</b>	<b>157.7052</b>	<b>0.0371</b>	<b>0.0000</b>	<b>158.6320</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.4 Building Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0420	0.0123	1.9000e-004	6.3100e-003	2.7000e-004	6.5900e-003	1.8200e-003	2.6000e-004	2.0900e-003	0.0000	17.7800	17.7800	7.0000e-005	2.6600e-003	18.5735
Worker	8.3900e-003	5.1500e-003	0.0668	2.0000e-004	0.0250	1.2000e-004	0.0251	6.6500e-003	1.1000e-004	6.7600e-003	0.0000	19.2645	19.2645	5.1000e-004	5.1000e-004	19.4278
<b>Total</b>	<b>9.3900e-003</b>	<b>0.0471</b>	<b>0.0791</b>	<b>3.9000e-004</b>	<b>0.0313</b>	<b>3.9000e-004</b>	<b>0.0317</b>	<b>8.4700e-003</b>	<b>3.7000e-004</b>	<b>8.8500e-003</b>	<b>0.0000</b>	<b>37.0445</b>	<b>37.0445</b>	<b>5.8000e-004</b>	<b>3.1700e-003</b>	<b>38.0013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0930	0.8479	1.0938	1.8300e-003		0.0359	0.0359		0.0338	0.0338	0.0000	157.7050	157.7050	0.0371	0.0000	158.6318
<b>Total</b>	<b>0.0930</b>	<b>0.8479</b>	<b>1.0938</b>	<b>1.8300e-003</b>		<b>0.0359</b>	<b>0.0359</b>		<b>0.0338</b>	<b>0.0338</b>	<b>0.0000</b>	<b>157.7050</b>	<b>157.7050</b>	<b>0.0371</b>	<b>0.0000</b>	<b>158.6318</b>

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.4 Building Construction - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0420	0.0123	1.9000e-004	6.3100e-003	2.7000e-004	6.5900e-003	1.8200e-003	2.6000e-004	2.0900e-003	0.0000	17.7800	17.7800	7.0000e-005	2.6600e-003	18.5735
Worker	8.3900e-003	5.1500e-003	0.0668	2.0000e-004	0.0250	1.2000e-004	0.0251	6.6500e-003	1.1000e-004	6.7600e-003	0.0000	19.2645	19.2645	5.1000e-004	5.1000e-004	19.4278
<b>Total</b>	<b>9.3900e-003</b>	<b>0.0471</b>	<b>0.0791</b>	<b>3.9000e-004</b>	<b>0.0313</b>	<b>3.9000e-004</b>	<b>0.0317</b>	<b>8.4700e-003</b>	<b>3.7000e-004</b>	<b>8.8500e-003</b>	<b>0.0000</b>	<b>37.0445</b>	<b>37.0445</b>	<b>5.8000e-004</b>	<b>3.1700e-003</b>	<b>38.0013</b>

**3.5 Paving - 2025****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	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
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>9.1500e-003</b>	<b>0.0858</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>20.0193</b>	<b>20.0193</b>	<b>6.4700e-003</b>	<b>0.0000</b>	<b>20.1811</b>



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Paving - 2025****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	4.0000e-004	2.5000e-004	3.2000e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9238	0.9238	2.0000e-005	2.0000e-005	0.9316
<b>Total</b>	<b>4.0000e-004</b>	<b>2.5000e-004</b>	<b>3.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>0.9238</b>	<b>0.9238</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9316</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811
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>9.1500e-003</b>	<b>0.0858</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>20.0192</b>	<b>20.0192</b>	<b>6.4700e-003</b>	<b>0.0000</b>	<b>20.1811</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Paving - 2025****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	4.0000e-004	2.5000e-004	3.2000e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9238	0.9238	2.0000e-005	2.0000e-005	0.9316
<b>Total</b>	<b>4.0000e-004</b>	<b>2.5000e-004</b>	<b>3.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>0.9238</b>	<b>0.9238</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9316</b>

**3.6 Architectural Coating - 2025****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	2.1625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
<b>Total</b>	<b>2.1642</b>	<b>0.0115</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.5567</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.5000e-004	1.9200e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5543	0.5543	1.0000e-005	1.0000e-005	0.5590
<b>Total</b>	<b>2.4000e-004</b>	<b>1.5000e-004</b>	<b>1.9200e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>0.0000</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5543</b>	<b>0.5543</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.5590</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.1625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
<b>Total</b>	<b>2.1642</b>	<b>0.0115</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>		<b>5.2000e-004</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.5567</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.5000e-004	1.9200e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5543	0.5543	1.0000e-005	1.0000e-005	0.5590
<b>Total</b>	<b>2.4000e-004</b>	<b>1.5000e-004</b>	<b>1.9200e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>0.0000</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5543</b>	<b>0.5543</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.5590</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3423	0.6453	4.1361	0.0118	1.2884	8.9600e-003	1.2973	0.3433	8.3600e-003	0.3517	0.0000	1,128.8601	1,128.8601	0.0739	0.0530	1,146.4918
Unmitigated	0.3423	0.6453	4.1361	0.0118	1.2884	8.9600e-003	1.2973	0.3433	8.3600e-003	0.3517	0.0000	1,128.8601	1,128.8601	0.0739	0.0530	1,146.4918

**4.2 Trip Summary Information**

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,208.32	1,221.12	1094.40	3,459,629	3,459,629
Total	1,208.32	1,221.12	1,094.40	3,459,629	3,459,629

**4.3 Trip Type Information**

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.524400	0.212000	0.167700	0.056300	0.000800	0.000900	0.007600	0.021200	0.000000	0.004300	0.002500	0.000100	0.002200

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	94.4360	94.4360	0.0153	1.8500e-003	95.3698
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	94.4360	94.4360	0.0153	1.8500e-003	95.3698
NaturalGas Mitigated	0.0166	0.1418	0.0603	9.0000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.1901	164.1901	3.1500e-003	3.0100e-003	165.1658
NaturalGas Unmitigated	0.0166	0.1418	0.0603	9.0000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.1901	164.1901	3.1500e-003	3.0100e-003	165.1658

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****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	3.07681e+006	0.0166	0.1418	0.0603	9.0000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.1901	164.1901	3.1500e-003	3.0100e-003	165.1658
<b>Total</b>		<b>0.0166</b>	<b>0.1418</b>	<b>0.0603</b>	<b>9.0000e-004</b>		<b>0.0115</b>	<b>0.0115</b>		<b>0.0115</b>	<b>0.0115</b>	<b>0.0000</b>	<b>164.1901</b>	<b>164.1901</b>	<b>3.1500e-003</b>	<b>3.0100e-003</b>	<b>165.1658</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	3.07681e+006	0.0166	0.1418	0.0603	9.0000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.1901	164.1901	3.1500e-003	3.0100e-003	165.1658
<b>Total</b>		<b>0.0166</b>	<b>0.1418</b>	<b>0.0603</b>	<b>9.0000e-004</b>		<b>0.0115</b>	<b>0.0115</b>		<b>0.0115</b>	<b>0.0115</b>	<b>0.0000</b>	<b>164.1901</b>	<b>164.1901</b>	<b>3.1500e-003</b>	<b>3.0100e-003</b>	<b>165.1658</b>

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.02067e+006	94.4360	0.0153	1.8500e-003	95.3698
<b>Total</b>		<b>94.4360</b>	<b>0.0153</b>	<b>1.8500e-003</b>	<b>95.3698</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.02067e+006	94.4360	0.0153	1.8500e-003	95.3698
<b>Total</b>		<b>94.4360</b>	<b>0.0153</b>	<b>1.8500e-003</b>	<b>95.3698</b>

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



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive 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	1.1502	0.0588	0.9699	3.6000e-004		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003	0.0000	57.0030	57.0030	2.5500e-003	1.0200e-003	57.3697
Unmitigated	1.1502	0.0588	0.9699	3.6000e-004		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003	0.0000	57.0030	57.0030	2.5500e-003	1.0200e-003	57.3697

**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	0.2163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.6000e-003	0.0479	0.0204	3.1000e-004		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	55.4506	55.4506	1.0600e-003	1.0200e-003	55.7801
Landscaping	0.0285	0.0109	0.9495	5.0000e-005		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003	0.0000	1.5525	1.5525	1.4900e-003	0.0000	1.5897
<b>Total</b>	<b>1.1502</b>	<b>0.0588</b>	<b>0.9699</b>	<b>3.6000e-004</b>		<b>9.1400e-003</b>	<b>9.1400e-003</b>		<b>9.1400e-003</b>	<b>9.1400e-003</b>	<b>0.0000</b>	<b>57.0030</b>	<b>57.0030</b>	<b>2.5500e-003</b>	<b>1.0200e-003</b>	<b>57.3697</b>

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****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	0.2163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.6000e-003	0.0479	0.0204	3.1000e-004		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	55.4506	55.4506	1.0600e-003	1.0200e-003	55.7801
Landscaping	0.0285	0.0109	0.9495	5.0000e-005		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003	0.0000	1.5525	1.5525	1.4900e-003	0.0000	1.5897
<b>Total</b>	<b>1.1502</b>	<b>0.0588</b>	<b>0.9699</b>	<b>3.6000e-004</b>		<b>9.1400e-003</b>	<b>9.1400e-003</b>		<b>9.1400e-003</b>	<b>9.1400e-003</b>	<b>0.0000</b>	<b>57.0030</b>	<b>57.0030</b>	<b>2.5500e-003</b>	<b>1.0200e-003</b>	<b>57.3697</b>

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

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.5237	0.2727	6.5300e-003	17.2877
Unmitigated	8.5237	0.2727	6.5300e-003	17.2877

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

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	8.33972 / 5.25765	8.5237	0.2727	6.5300e-003	17.2877
<b>Total</b>		<b>8.5237</b>	<b>0.2727</b>	<b>6.5300e-003</b>	<b>17.2877</b>

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	8.33972 / 5.25765	8.5237	0.2727	6.5300e-003	17.2877
<b>Total</b>		<b>8.5237</b>	<b>0.2727</b>	<b>6.5300e-003</b>	<b>17.2877</b>

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.9539	1.6520	0.0000	69.2546
Unmitigated	27.9539	1.6520	0.0000	69.2546

## Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	137.71	27.9539	1.6520	0.0000	69.2546
<b>Total</b>		<b>27.9539</b>	<b>1.6520</b>	<b>0.0000</b>	<b>69.2546</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	137.71	27.9539	1.6520	0.0000	69.2546
<b>Total</b>		<b>27.9539</b>	<b>1.6520</b>	<b>0.0000</b>	<b>69.2546</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Tract 6192 - Blythe and Dayton - San Joaquin Valley Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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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# Appendix D

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## Energy Calculations

Construction Equipment Energy Use

Phase Name	Off Road Equipment Type	Off Road Equipment Unit Amount <sup>1</sup>	Usage Hours Per Day <sup>1</sup>	Horse Power (lbs/sec) <sup>1</sup>	Load Factor <sup>1</sup>	Total Operational Hours	BSFC <sup>2</sup>	Fuel Used (gallons) <sup>3</sup>	MBTU <sup>4</sup>
Site Preparation	Rubber Tired Dozers	3	8	247	0.4	240	0.367	1224.12	170.1534
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	320	0.408	659.14	91.61992
Grading	Excavators	2	8	158	0.38	480	0.367	1487.78	206.8018
Grading	Graders	1	8	187	0.41	240	0.367	949.94	132.0411
Grading	Rubber Tired Dozers	1	8	247	0.4	240	0.367	1224.12	170.1534
Grading	Scrapers	2	8	367	0.48	480	0.367	4365.22	606.7655
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	480	0.408	988.70	137.4299
Building Construction	Cranes	1	7	231	0.29	2100	0.367	7262.51	1009.489
Building Construction	Forklifts	3	8	89	0.2	7200	0.408	7355.36	1022.396
Building Construction	Generator Sets	1	8	84	0.74	2400	0.408	8561.97	1190.114
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	6300	0.408	12976.74	1803.767
Building Construction	Welders	1	8	46	0.45	2400	0.408	2851.24	396.3219
Paving	Pavers	2	8	130	0.42	320	0.367	901.99	125.3762
Paving	Paving Equipment	2	8	132	0.36	320	0.367	785.03	109.1186
Paving	Rollers	2	8	80	0.38	320	0.408	558.31	77.60506
Architectural Coating	Air Compressors	1	6	78	0.48	120	0.408	257.85	35.84128
Total								52410.03	7284.99

Construction Phases

PhaseNumber	Phase Name	Phase Type	Phase Start Date	Phase End Date	Num Days Week	Total Number of Days	
1	Site Preparation	Site Preparation	2021/07/29	2021/08/11	5	10	1883.26
2	Grading	Grading	2021/08/12	2021/09/22	5	30	9015.77
3	Building Construction	Building Constr	2021/09/23	2022/11/16	5	300	39007.83
4	Paving	Paving	2022/11/17	2022/12/14	5	20	2245.32
5	Architectural Coating	Architectural Co	2022/12/15	2023/01/11	5	20	257.85

Notes

1. CalEEMod Default Values Used
2. BSFC - Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367
3. Fuel Used = Load Factor x Horsepower x Total Operational Hours x BSFC / Unit Conversion
4. MBTU calculated for comparison purposes. Assumed 1 gallon of diesel = 0.139 MBTU



Mobile Energy Use (Construction)

Worker Trips

	Daily Worker Trips <sup>1</sup>	Worker Trip Length <sup>1</sup>	VMT/Day	MPG Factor (EMFAC2017)	Gallons of Gas/Day	# of Days	Total Gallons of Gas	MBTU	
Site Preparation	18	10.8	194.4	29.23	6.7	10	66.5	7.720799	1949.8
Grading	20	10.8	216	29.23	7.4	30	221.7	25.736	9237.5
Building Construction	44	10.8	475.2	29.23	16.3	300	4877.2	566.1919	43885.0
Paving	6	10.8	64.8	29.23	2.2	20	44.3	5.147199	2289.7
Architectural Coating	1	10.8	10.8	29.23	0.4	20	7.4	0.857867	265.2
Total	89	N/A	N/A	N/A	N/A	380	5217.1	605.6538	57627.1

Vendor Trips

	Daily Vendor Trips	Vendor Trip Length	VMT/Day	MPG Factor	Gallons of Diesel/Day	# of Days	Total Gallons of Diesel	MBTU
Building Construction	13	7.3	94.9	8.43	11.3	300	3377.224199	469.4342

Fleet Characteristics

	Vehicle Class	Fleet Mix	2024 MPG Factor (EMFAC2017)	Average MPG Factor
Assumed Vehicle Fleet for Workers	LDA	33%	33.24	29.23
	LDT1	33%	28.07	
	LDT2	33%	26.38	
Assumed Vehicle Fleet for Vendor Trips	MHD	50%	9.74	8.43
	HHD	50%	7.12	

Notes

1. CalEEMod Default values used

2. MBTU calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.11609 MBTU

Mobile Energy Use (Operations)

Total Annual VMT from Project (CalEEMod)	3,297,459
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Fleet Mix & Fuel Calculations

Vehicle Class	Proportion of Fleet Mix <sup>1</sup>	Annual VMT by Vehicle Class	Proportion of vehicle class using gas or diesel (EMFAC2017) <sup>2</sup>		Annual VMT by Vehicle Class and Fuel Type		Fuel Efficiency (MPG) by Vehicle Class and Fuel Type (EMFAC2017)		Annual Fuel Use from Project (gallons)		MBTU/Year <sup>3</sup>
			Gas	Diesel	Gas	Diesel	Gas	Diesel	Gas	Diesel	
LDA	52.1600%	1719954.6	100%	0%	1715904.57	4050.05	28.45	43.16	60303.4	93.8	7013.7
LDT1	21.0000%	692466.4	100%	0%	692286.06	180.33	23.55	25.07	29393.2	7.2	3413.3
LDT2	17.0000%	560568.0	100%	0%	559037.24	1530.79	22.67	32.17	24663.8	47.6	2869.8
MDV	6.0000%	197847.5	98%	2%	194636.36	3211.18	18.46	24.08	10541.9	133.3	1242.3
LHD1	0.0800%	2638.0	50%	50%	1317.62	1320.35	9.10	15.73	144.8	83.9	28.5
LHD2	0.0900%	2967.7	30%	70%	894.21	2073.50	8.20	12.91	109.1	160.7	35.0
MHD	0.7600%	25060.7	13%	87%	3313.64	21747.05	4.58	8.58	722.9	2534.6	436.2
HHH	2.0000%	65949.2	0%	100%	6.70	65942.48	3.08	5.89	2.2	11203.3	1557.5
OBUS	0.0000%	0.0	61%	39%	0.00	0.00	4.67	6.70	0.0	0.0	0.0
UBUS	0.4300%	14179.1	49%	51%	7014.68	7164.39	5.05	9.04	1387.7	792.1	271.2
MCY	0.2500%	8243.6	100%	0%	8243.65	0.00	40.66	NA	202.7	0.0	23.5
SBUS	0.0100%	329.7	43%	57%	140.97	188.78	9.82	8.13	14.3	23.2	4.9
MH	0.2200%	7254.4	69%	31%	5022.29	2232.12	4.41	9.42	1139.2	237.0	165.2
Total	100.00%	3297459.0			3187817.99	109641.01			128,625	15,317	17,061

Fleet Characteristics

Source: EMFAC2017 (v1.0.3) Emissions Inventory  
Region Type: Air District  
Region:San Joaquin Valley Unified APCD  
Calendar Year: 2022  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

GASOLINE

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT (Annual)	Trips (Annual)	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
San Joaquin Valley	2022	HHDT	Aggregate	Aggregate	Gasoline	30.34626345	338559.5976	198543.9488	109.8770159	109877	3.08
San Joaquin Valley	2022	LDA	Aggregate	Aggregate	Gasoline	1395012.489	18892638048	2242175330	663959.3863	663959386	28.45
San Joaquin Valley	2022	LDT1	Aggregate	Aggregate	Gasoline	141302.7083	1551987119	209915323.5	65894.58088	65894581	23.55
San Joaquin Valley	2022	LDT2	Aggregate	Aggregate	Gasoline	597941.793	7956588174	960548212.9	351031.1189	351031119	22.67
San Joaquin Valley	2022	LHDT1	Aggregate	Aggregate	Gasoline	63892.81752	725024737.1	311273844.3	79695.40918	79695409	9.10
San Joaquin Valley	2022	LHDT2	Aggregate	Aggregate	Gasoline	10257.23521	117218570.7	49971329.47	14301.29793	14301298	8.20
San Joaquin Valley	2022	MCY	Aggregate	Aggregate	Gasoline	72763.38943	138371660.6	50497792.26	3402.818786	3402819	40.66
San Joaquin Valley	2022	MDV	Aggregate	Aggregate	Gasoline	623080.3485	7575029222	978493818.5	410278.2295	410278229	18.46
San Joaquin Valley	2022	MH	Aggregate	Aggregate	Gasoline	9448.333022	26571078.06	309084.074	6027.262367	6027262	4.41
San Joaquin Valley	2022	MHDT	Aggregate	Aggregate	Gasoline	4433.931096	78105985.94	29009508.53	17039.40896	17039409	4.58
San Joaquin Valley	2022	OBUS	Aggregate	Aggregate	Gasoline	1408.601395	23855943.89	9215938.026	5106.676018	5106676	4.67
San Joaquin Valley	2022	SBUS	Aggregate	Aggregate	Gasoline	1102.092394	21637498.73	1441536.852	2202.533317	2202533	9.82
San Joaquin Valley	2022	UBUS	Aggregate	Aggregate	Gasoline	315.7591724	7059094.515	413012.9975	1396.520418	1396520	5.05

DIESEL

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
San Joaquin Valley	2022	HHDT	Aggregate	Aggregate	Diesel	70692.50107	3334410700	383922879.9	566498.3088	566498309	5.89
San Joaquin Valley	2022	LDA	Aggregate	Aggregate	Diesel	4022.967974	44592249.55	5984969.148	1033.14592	1033146	43.16
San Joaquin Valley	2022	LDT1	Aggregate	Aggregate	Diesel	87.61915027	404270.961	90721.71528	16.1277571	16128	25.07
San Joaquin Valley	2022	LDT2	Aggregate	Aggregate	Diesel	1502.938786	21787160.7	2477469.1	677.3164575	677316	32.17
San Joaquin Valley	2022	LHDT1	Aggregate	Aggregate	Diesel	61912.57366	726528364.1	254661809	46188.31845	46188318	15.73
San Joaquin Valley	2022	LHDT2	Aggregate	Aggregate	Diesel	22432.7287	271806029.4	92271390.67	21059.15752	21059158	12.91
San Joaquin Valley	2022	MDV	Aggregate	Aggregate	Diesel	9129.093943	124975483.7	14902087.38	5189.810887	5189811	24.08
San Joaquin Valley	2022	MH	Aggregate	Aggregate	Diesel	4126.50413	11809321.64	134936.685	1254.008189	1254008	9.42
San Joaquin Valley	2022	MHDT	Aggregate	Aggregate	Diesel	34243.52336	512600710.4	127683228	59743.08961	59743090	8.58
San Joaquin Valley	2022	OBUS	Aggregate	Aggregate	Diesel	679.1685413	15541263.06	2546011.727	2319.052537	2319053	6.70
San Joaquin Valley	2022	SBUS	Aggregate	Aggregate	Diesel	3916.394573	28976524.86	18543971.65	3563.806013	3563806	8.13
San Joaquin Valley	2022	UBUS	Aggregate	Aggregate	Diesel	231.9103669	7209747.48	303338.7598	797.1254785	797125	9.04

Notes

- 1. Used project-specific vehicle fleet mix for retail: <http://www.valleyair.org/isr/Documents/Residential-Fleet-Mix.pdf>
- 2. Proportion of diesel vs. gasoline vehicles calculated based on total annual VMT for each vehicle class
- 3. MBTU Calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.116090 MBTU and 1 gallon of diesel = 0.139 MBTU

# Appendix E

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## Acoustical Analysis

**ACOUSTICAL ANALYSIS**

**TRACT 6192  
FRESNO, CALIFORNIA**

**WJVA Project No. 22-16**

**PREPARED FOR**

**4CREEKS  
324 S. SANTA FE STREET, SUITE A  
VISALIA, CALIFORNIA 93292**

**PREPARED BY**

**WJV ACOUSTICS, INC.  
VISALIA, CALIFORNIA**



**wjv acoustics**

**MARCH 8, 2022**

## INTRODUCTION

The project is a proposed 86-lot single-family residential development to be located in Fresno, California. The project site is located at the northeast corner of the intersection of N. Blythe Avenue and W. Dayton Avenue. The City of Fresno has requested an acoustical analysis to quantify project site noise exposure and determine noise mitigation requirements. This analysis, prepared by WJV Acoustics, Inc. (WJVA), is based upon a project site plan prepared by Precision Engineering (dated January 7, 2022), traffic data provided by the Fresno Council of Governments (Fresno COG) and the findings of on-site noise level measurements. Revisions to the site plan may affect the findings and recommendations of this report. The site plan is provided as Figure 1.

Appendix A provides a description of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported are in A-weighted decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a high degree of correlation with human annoyance and health effects. Appendix B provides typical A-weighted sound levels for common noise sources.

## NOISE EXPOSURE CRITERIA

### General Plan

The City of Fresno General Plan Noise Element provides noise level criteria for land use compatibility for both transportation and non-transportation noise sources. The General Plan sets noise compatibility standards for transportation noise sources in terms of the Day-Night Average Level ( $L_{dn}$ ). The  $L_{dn}$  represents the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The  $L_{dn}$  represents cumulative exposure to noise over an extended period of time and are therefore calculated based upon *annual average* conditions. Table I provides the General Plan noise level standards for transportation noise sources.

<p style="text-align: center;">TABLE I</p> <p style="text-align: center;">CITY OF FRESNO GENERAL PLAN NOISE LEVEL STANDARDS TRANSPORTATION (NON-AIRCRAFT) NOISE SOURCES</p>			
Noise-Sensitive Land Use	Outdoor Activity Areas <sup>1</sup>	Interior Spaces	
	$L_{dn}$ /CNEL, dB	$L_{dn}$ /CNEL, dB	$L_{eq}$ dB <sup>2</sup>
Residential	65	45	---
Transient Lodging	65	45	---
Hospitals, Nursing Homes	65	45	---
Theaters, Auditoriums, Music Halls	---	---	35
Churches, Meeting Halls	65	---	45
Office Buildings	---	---	45
Schools, Libraries, Museums	---	---	45

1 Where the location of the outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.

2 As determined for a typical worst-case hour during periods of use.

Source: City of Fresno General Plan

**Implementation Policy NS-1-a** of the General Plan provides guidance in regards to the development of new noise sensitive land uses (including residential developments).

***Desirable and Generally Acceptable Exterior Noise Environment.*** Establish 65 dBA  $L_{dn}$  or CNEL as the standard for the desirable maximum average exterior noise levels for defined usable exterior areas of residential and noise-sensitive uses for noise, but designate 60 dBA  $L_{dn}$  or CNEL (measured at the property line) for noise generated by stationary sources impinging upon residential and noise-sensitive uses. Maintain 65 dBA  $L_{dn}$  or CNEL as the maximum average exterior noise levels for non-sensitive commercial land uses, and maintain 70 dBA  $L_{dn}$  or CNEL as maximum average exterior noise level for industrial land uses, both to be measured at the property line of parcels where noise is generated which may impinge on neighboring properties.

The General Plan also provides noise level standards for non-transportation (stationary) noise sources. The General Plan noise level standards for non-transportation noise sources are identical to those provided in the City's Municipal code, provided below in Table II.

**Implementation Policy NS-1-i** of the General Plan Noise Element provides guidance in regards to mitigation for new developments and projects that have potential to result in a noise-related impact at existing noise-sensitive land uses.

***Mitigation by New Development.*** *Require an acoustical analysis where new development of industrial, commercial or other noise generating land uses (including transportation facilities such as roadways, railroads, and airports) may result in noise levels that exceed the noise level exposure criteria established by [Table I] and [Table II] to determine impacts, and require developers to mitigate these impacts in conformance with Tables 9-2 and 9-3 as a condition of permit approval through appropriate means.*

*Noise mitigation measures may include:*

- *The screening of noise sources such as parking and loading facilities, outdoor activities, and mechanical equipment;*
- *Providing increased setbacks for noise sources from adjacent dwellings;*
- *Installation of walls and landscaping that serve as noise buffers;*
- *Installation of soundproofing materials and double-glazed windows; and*
- *Regulating operations, such as hours of operation, including deliveries and trash pickup.*

*Alternative acoustical designs that achieve the prescribed noise level reduction may be approved by the City, provided a qualified Acoustical Consultant submits information demonstrating that the alternative designs will achieve and maintain the specific targets for outdoor activity areas and interior spaces. As a last resort, developers may propose to construct noise walls along roadways when compatible with aesthetic concerns and neighborhood character. This would be a developer responsibility, with no City funding.*

**Implementation Policy NS-1-j** of the General Plan Noise Element provides guidance in regards to the establishment of a significance threshold when determining an increase in noise levels over existing ambient noise levels.

***Significance Threshold.*** *Establish, as a threshold of significance for the City's environmental review process, that a significant increase in ambient noise levels is*

*assumed if the project would increase noise levels in the immediate vicinity by 3 dB L<sub>dn</sub> or CNEL or more above the ambient noise limits established in this General Plan Update.*

*Commentary: When an increase in noise would result in a “significant” impact (increase of three dBA or more) to residents or businesses, then noise mitigation would be required to reduce noise exposure. If the increase in noise is less than three dBA, then the noise impact is considered insignificant and no noise mitigation is needed. By setting a specific threshold of significance in the General Plan, this policy facilitates making a determination of environmental impact, as required by the California Environmental Quality Act. It helps the City determine whether (1) the potential impact of a development project on the noise environment warrants mitigation, or (2) a statement of overriding considerations will be required.*

### **Municipal Code**

Section 15-2506 of the City of Fresno Municipal code establishes hourly acoustical performance standards for non-transportation noise sources. The standards, provided in Table II, are made more restrictive during the nighttime hours of 10:00 p.m. to 7:00 a.m. Additionally, the municipal code states that when ambient noise levels exceed or equal the levels described in Table II, mitigation shall only be required to limit noise to the existing ambient noise levels, plus five (5) dB. Section 15-2506 of the Municipal Code is consistent with Implementing Policy NS-1-I of the Noise Element of the City of Fresno General Plan (adopted 12/18/14).

TABLE II			
NON-TRANSPORTATION NOISE LEVEL STANDARDS, dBA			
CITY OF FRESNO MUNICIPAL CODE, SECTION 15-2506			
Daytime (7 a.m.-10 p.m.)		Nighttime (10 p.m.-7 a.m.)	
L <sub>eq</sub>	L <sub>max</sub>	L <sub>eq</sub>	L <sub>max</sub>
50	70	45	60
Source: City of Fresno Municipal Code			

Additional guidance is provided in Section 10-102(b) of the City’s Municipal Code. Section 10 provides existing ambient noise levels to be applied to various districts, further divided into various hours of the day. Table III describes the assumed minimum ambient noise levels by district and time. Section 10-102(b) states *“For the purpose of this ordinance, ambient noise level is the level obtained when the noise level is averaged over a period of fifteen minutes, without inclusion of the offending noise, at the location and time of day at which a comparison with the offending noise is to be made. Where the ambient noise level is less than that designated in this section, however, the noise level specified herein shall be deemed to be the ambient noise level for that location”*.



<p>TABLE III</p> <p>ASSUMED MINIMUM AMBIENT NOISE LEVEL, dBA</p> <p>CITY OF FRESNO MUNICIPAL CODE, SECTION 10-102(B)</p>		
DISTRICT	TIME	SOUND LEVEL, dB L <sub>eq</sub>
RESIDENTIAL	10 PM TO 7 AM	50
RESIDENTIAL	7 PM TO 10 PM	55
RESIDENTIAL	7 AM TO 7 PM	60
COMMERCIAL	10 PM TO 7 AM	60
COMMERCIAL	7 AM TO 10 PM	65
INDUSTRIAL	ANYTIME	70
Source: City of Fresno Municipal Code		

Section 10-106 (Prima Facie Violation) States *“Any noise or sound exceeding the ambient noise level at the properly line of any person offended thereby, or, if a condominium or apartment house, within any adjoining living unit, by more than five decibels shall be deemed to prima facie evidence of a violation of Section 8-305.”*

For noise sources that are not transportation related, which usually includes commercial or industrial activities and other stationary noise sources (such as amplified music), it is common to assume that a 3-5 dB increase in noise levels represents a substantial increase in ambient noise levels. This is based on laboratory tests that indicate that a 3 dB increase is the minimum change perceptible to most people, and a 5 dB increase is perceived as a “definitely noticeable change.”

Appendix A provides definitions of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise. Appendix B provides typical A-weighted sound levels for common noise sources.

## PROJECT SITE NOISE EXPOSURE

The project site is located at the northeast corner of the intersection of N. Blythe Avenue and W. Dayton Avenue, in Fresno, California. The project site is exposed traffic noise associated with vehicles on N. Blythe Avenue. The distance from center of the backyards of the closest proposed lots to the centerline of N. Blythe Avenue is approximately 75 feet.

### **Traffic Noise Exposure**

Noise exposure from traffic on N. Blythe Avenue was calculated for existing and future (2035) conditions using the FHWA Traffic Noise Model and traffic data obtained from Fresno COG. A description of the noise model, applied data, methodology and findings is provided below.

WJVA utilized the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA Model is a standard analytical method used for roadway traffic noise calculations. The model is based upon reference energy emission levels for automobiles, medium trucks (2 axles) and heavy trucks (3 or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model was developed to predict hourly  $L_{eq}$  values for free-flowing traffic conditions, and is generally considered to be accurate within  $\pm 1.5$  dB. To predict  $L_{dn}$  values, it is necessary to determine the hourly distribution of traffic for a typical day and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

Noise level measurements and concurrent traffic counts were conducted by WJVA staff within the project site on February 21, 2022. The purpose of the measurement was to evaluate the accuracy of the FHWA Model in describing traffic noise exposure within the project site. The traffic noise measurement site was located at a distance of approximately 70 feet from the centerline of N. Blythe Avenue. The speed limit was assumed to be 40 mph (miles per hour). The project vicinity and noise monitoring site location are provided as Figure 3. A photograph showing the N. Blythe Avenue noise measurement site is provided as Figure 4.

Noise monitoring equipment consisted of Larson-Davis Laboratories Model LDL-820 sound level analyzer equipped with a B&K Type 4176 1/2" microphone. The equipment complies with the specifications of the American National Standards Institute (ANSI) for Type I (Precision) sound level meters. The meter was calibrated in the field prior to use with a B&K Type 4230 acoustic calibrator to ensure the accuracy of the measurements. The microphone was located on a tripod at 5 feet above the ground. The project site presently consists of undeveloped land and a portion is currently used for industrial purposes.

Noise measurements were conducted in terms of the equivalent energy sound level ( $L_{eq}$ ). Measured  $L_{eq}$  values were compared to  $L_{eq}$  values calculated (predicted) by the FHWA Model using as inputs the traffic volumes, truck mix and vehicle speed observed during the noise measurements. The results of the comparison are shown in Table IV.

From Table IV it may be determined that the traffic noise levels predicted by the FHWA Model

were 0.9 dB lower than those measured for the conditions observed at the time of the noise measurements for N. Blythe Avenue. This is considered to be reasonable agreement with the model and therefore no adjustments to the model are necessary.

<p><b>TABLE IV</b></p> <p><b>COMPARISON OF MEASURED AND PREDICTED (FHWA MODEL) NOISE LEVELS TRACT 6192 FRESNO</b></p>	
	N. Blythe Ave.
Measurement Start Time	5:40 p.m.
Observed # Autos/Hr.	660
Observed # Medium Trucks/Hr.	60
Observed # Heavy Trucks/Hr.	0
Observed Speed (MPH)	40
Distance, ft. (from center of roadway)	70
L <sub>eq</sub> , dBA (Measured)	64.0
L <sub>eq</sub> , dBA (Predicted)	63.1
<b>Difference between Predicted and Measured L<sub>eq</sub>, dBA</b>	<b>0.9</b>
<p>Note: FHWA "soft" site assumed for calculations. Source: WJV Acoustics, Inc.</p>	

Annual Average Daily Traffic (AADT) data for N. Blythe Avenue in the project vicinity was obtained from Fresno COG. Truck percentages and the day/night distribution of traffic were estimated by WJVA, based upon previous studies conducted in the project vicinity since project-specific data were not available from government sources. A speed limit of 40 mph was assumed for the roadway. Table V summarizes annual average traffic data used to model noise exposure within the project site.

TABLE V		
TRAFFIC NOISE MODELING ASSUMPTIONS		
TRACT 6192, FRESNO		
	N. Blythe Ave (s/o Alicante Ave)	
	Existing	2035
Annual Avenue Daily Traffic (AADT)	6,232	5,112
Day/Night Split (%)	90/10	
Assumed Vehicle Speed (mph)	40	
% Medium Trucks (% AADT)	2	
% Heavy Trucks (% AADT)	1	
Sources: Fresno COG		
WJV Acoustics, Inc.		

Using data from Table V, the FHWA Model, annual average traffic noise exposure was calculated for the closest proposed backyards from N. Blythe Avenue. Table VI provides the noise exposure levels for N. Blythe Avenue, at the closest proposed residential lots to the roadway.

<p><b>TABLE VI</b></p> <p><b>MODELED TRAFFIC NOISE LEVELS, N. BLYTHE AVENUE, dB, L<sub>dn</sub></b></p> <p><b>TRACT 6192, FRESNO</b></p>		
Roadway	Existing Conditions	2035 Conditions
N. Blythe Avenue (south of Alicante Avenue)	60.4	59.5
Source: WJV Acoustics Fresno COG		

Reference to Table VI indicates that the traffic noise exposure at the closest lots to N. Blythe Avenue would be approximately 60 dB L<sub>dn</sub> for existing conditions and approximately 60dB L<sub>dn</sub> for future (2035) traffic conditions on N. Blythe Avenue. Such noise exposure levels do not exceed the City's 65 dB L<sub>dn</sub> exterior noise level standard and mitigation measures are not required for compliance with the City's exterior noise level standard.

### **Interior Noise Exposure:**

The City of Fresno interior noise level standard is 45 dB L<sub>dn</sub>. The worst-case noise exposure within the proposed residential development would be approximately 60 dB L<sub>dn</sub> (Existing and 2035 conditions). This means that the proposed residential construction must be capable of providing a minimum outdoor-to-indoor noise level reduction (NLR) of approximately 15 dB (60-45=15).

A specific analysis of interior noise levels was not performed. However, it may be assumed that residential construction methods complying with current building code requirements will reduce exterior noise levels by approximately 25 dB if windows and doors are closed. This will be sufficient for compliance with the City's 45 dB L<sub>dn</sub> interior standard at all proposed lots. Requiring that it be possible for windows and doors to remain closed for sound insulation means that air conditioning or mechanical ventilation will be required.

## CONCLUSIONS AND RECOMMENDATIONS

The proposed 86-lot single-family residential development will comply with all City of Fresno exterior and interior noise level standards, without the need for further mitigation measures, provided that air conditioning or mechanical ventilation is incorporated into final project design.

The conclusions and recommendations of this acoustical analysis are based upon the best information known to WJV Acoustics Inc. (WJVA) at the time the analysis was prepared concerning the proposed lot layout plan, project site elevation, traffic volumes and roadway configurations. Any significant changes in these factors will require a reevaluation of the findings of this report. Additionally, any significant future changes in motor vehicle technology, noise regulations or other factors beyond WJVA's control may result in long-term noise results different from those described by this analysis.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Walter J. Van Groningen', with a stylized flourish extending to the right.

Walter J. Van Groningen  
President

WJV:wjv

22-16 (Tract 6192, Fresno) 3-8-22





**FIGURE 2: PROJECT SITE VICINITY AND NOISE MEASUREMENT LOCATION**





**FIGURE 3: N. BLYTHE AVENUE NOISE MEASUREMENT SITE**





## APPENDIX A

### ACOUSTICAL TERMINOLOGY

<b>AMBIENT NOISE LEVEL:</b>	The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
<b>CNEL:</b>	Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.
<b>DECIBEL, dB:</b>	A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
<b>DNL/<math>L_{dn}</math>:</b>	Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.
<b><math>L_{eq}</math>:</b>	Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. $L_{eq}$ is typically computed over 1, 8 and 24-hour sample periods.
<b>NOTE:</b>	The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while $L_{eq}$ represents the average noise exposure for a shorter time period, typically one hour.
<b><math>L_{max}</math>:</b>	The maximum noise level recorded during a noise event.
<b><math>L_n</math>:</b>	The sound level exceeded "n" percent of the time during a sample interval ( $L_{90}$ , $L_{50}$ , $L_{10}$ , etc.). For example, $L_{10}$ equals the level exceeded 10 percent of the time.

## **A-2**

### **ACOUSTICAL TERMINOLOGY**

#### **NOISE EXPOSURE CONTOURS:**

Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

#### **NOISE LEVEL REDUCTION (NLR):**

The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of “noise level reduction” combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

#### **SEL or SENEL:**

Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

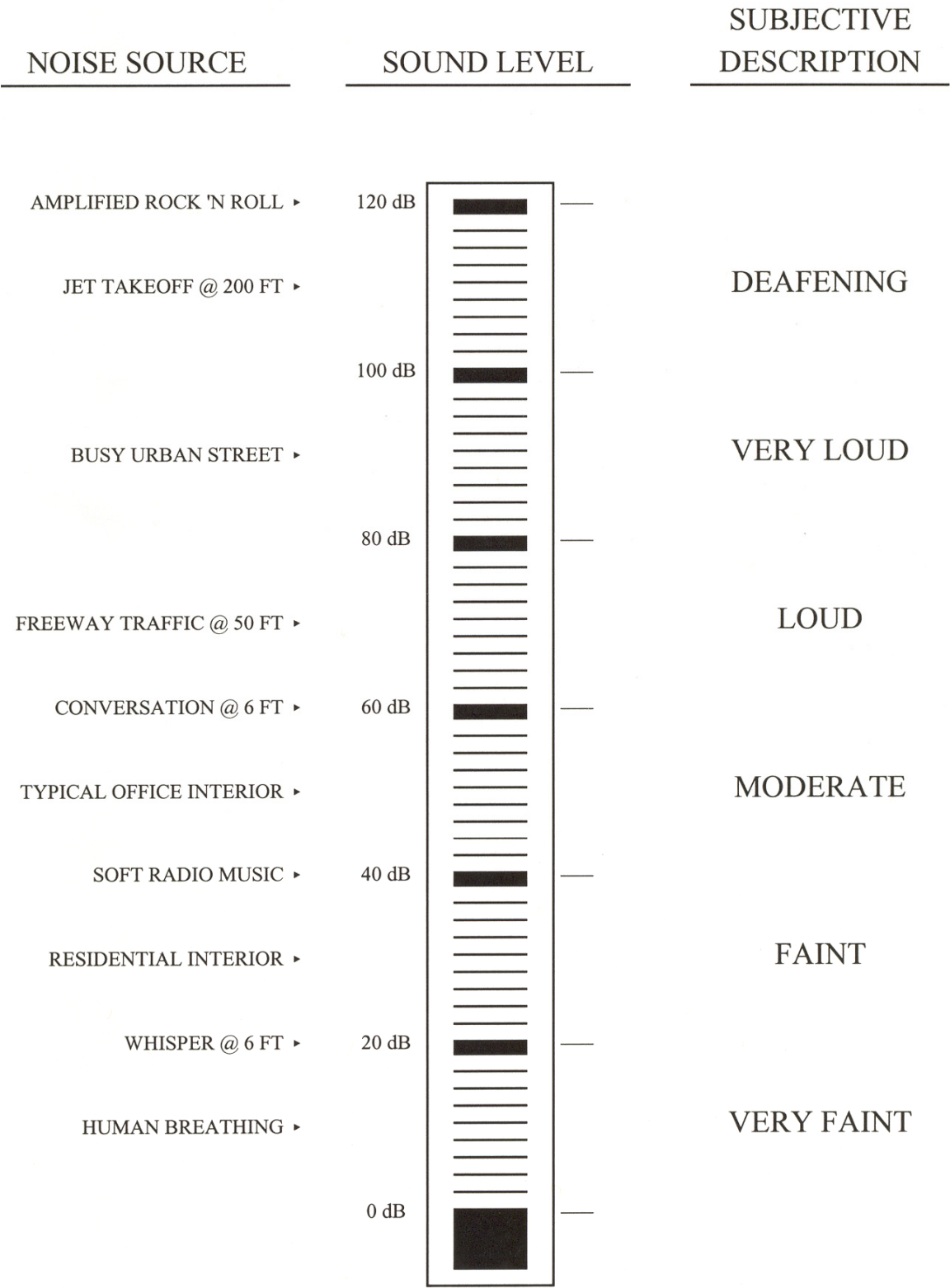
#### **SOUND LEVEL:**

The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

#### **SOUND TRANSMISSION CLASS (STC):**

The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

# APPENDIX B EXAMPLES OF SOUND LEVELS



## **Mitigation Measure Monitoring Program for Tentative Tract Map No. 6192 (T-6192)**

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed Living Spaces Fresno Project (project). The MMRP, which is found in Table A of this section, lists mitigation measures recommended in the IS/MND for the proposed project and identifies mitigation monitoring requirements.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of an MMRP when mitigation measures are required to avoid significant impacts. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process. The MMRP is intended to ensure compliance during implementation of the project.

The MMRP is organized in a matrix format. The first column identifies the mitigation measure. The second column, entitled "Timing for Mitigation Measure," refers to the implementation and schedule of mitigation measures. The third column, entitled "Mitigation Responsibility," refers to the party responsible for implementing the mitigation measure. The fourth column, entitled "Monitoring/Reporting Agency," refers to the agency responsible for oversight or ensuring that the mitigation measure is implemented. The fifth column, entitled "Verification," will be initialed and dated by the individual designated to verify adherence to the project specific mitigation, when the mitigation measure is completed.

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**Table A: Mitigation Monitoring and Reporting Program**

<b>MITIGATION MEASURE</b>	<b>Timing for Mitigation Measure</b>	<b>Mitigation Responsibility</b>	<b>Monitoring/ Reporting Agency</b>	<b>Verification (Initials and Date)</b>
<b>I. AESTHETICS</b>				
<b>Mitigation Measure AES-4.1:</b> Lighting for Street and Parking Areas. Lighting systems for street and parking areas shall include shields to direct light to the roadway surfaces and parking areas. Vertical shields on the light fixtures shall also be used to direct light away from adjacent light sensitive land uses such as residences.	Prior to issuance of building permits	Project Applicant	Public Works Department (PW) and Planning and Development	
<b>Mitigation Measure AES-4.2:</b> Lighting for Public Facilities. Lighting systems for public facilities such as active play areas shall provide adequate illumination for the activity; however, low intensity light fixtures and shields shall be used to minimize spillover light onto adjacent properties.	Prior to issuance of building permits	Project Applicant	Planning and Development	
<b>Mitigation Measure AES-4.3:</b> Lighting for Non-Residential Uses. Lighting systems for non-residential uses, not including public facilities, shall provide shields on the light fixtures and orient the lighting system away from adjacent properties. Low intensity light fixtures shall also be used if excessive spillover light onto adjacent properties will occur.	Prior to issuance of building permits	Project Applicant	Planning and Development	
<b>Mitigation Measure AES-4.4:</b> Signage Lighting. Lighting systems for freestanding signs shall not exceed 100 foot-Lamberts (FT-L) when adjacent to streets which have an average light intensity of less than 2.0 horizontal footcandles	Prior to issuance of building permits	Project Applicant	Planning and Development	

**Table A: Mitigation Monitoring and Reporting Program**

<b>MITIGATION MEASURE</b>	<b>Timing for Mitigation Measure</b>	<b>Mitigation Responsibility</b>	<b>Monitoring/ Reporting Agency</b>	<b>Verification (Initials and Date)</b>
and shall not exceed 500 FT-L when adjacent to streets which have an average light intensity of 2.0 horizontal footcandles or greater.				
<b>Mitigation Measure AES-4.5:</b> Use of Non-Reflective Materials. Materials used on building facades shall be non-reflective.	Prior to issuance of building permits	Project Applicant	Planning and Development	
<b>II. AGRICULTURE AND FORESTRY RESOURCES</b>				
There are no significant impacts to Agriculture and Forestry Resources.				
<b>III. AIR QUALITY</b>				
There are no significant impacts to Air Quality.				
<b>IV. BIOLOGICAL RESOURCES</b>				
<b>Mitigation Measure BIO-1.1:</b> Construction of a proposed project shall avoid, where possible, vegetation communities that provide suitable habitat for a special-status species known to occur within the Planning Area. If construction within potentially suitable habitat must occur, the presence/absence of any special-status plant or wildlife species must be determined prior to construction, to determine if the habitat supports any special-status species. If a special-status species are determined to occupy any portion of a project site, avoidance and minimization measures shall be incorporated into the construction phase of a project to avoid direct or incidental take of a listed species to the greatest extent feasible.	Prior to issuance of grading permits	Construction contractor, qualified biologist	Planning and Development	
<b>Mitigation Measure BIO-1.2:</b> Direct or	Prior to	Construction	Planning and	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>incidental take of any state or federally listed species shall be avoided to the greatest extent feasible. If construction of a proposed project will result in the direct or incidental take of a listed species, consultation with the resources agencies and/or additional permitting may be required. Agency consultation through the CDFW 2081 and USFWS Section 7 or Section 10 permitting processes shall take place prior to any action that may result in the direct or incidental take of a listed species. Specific mitigation measures for direct or incidental impacts to a listed species will be determined on a case-by- case basis through agency consultation.</p>	<p>issuance of grading permits</p>	<p>contractor, qualified biologist</p>	<p>Development</p>	
<p><b>Mitigation Measure BIO-1.3:</b> Development within the Planning Area shall avoid, where possible, special-status natural communities and vegetation communities that provide suitable habitat for special-status species. If a proposed project will result in the loss of a special-status natural community or suitable habitat for special-status species, compensatory habitat-based mitigation is required under CEQA and CESA. Mitigation shall consist of preserving on-site habitat, restoring similar habitat or purchasing off-site credits from an approved mitigation bank. Compensatory mitigation shall be determined through</p>	<p>Prior to issuance of grading permits</p>	<p>Construction contractor, qualified biologist</p>	<p>Planning and Development</p>	



**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
consultation with the City and/or resource agencies. An appropriate mitigation strategy and ratio shall be agreed upon by the developer and lead agency to reduce project impacts to special-status natural communities to a less than significant level. Agreed-upon mitigation ratios shall depend on the quality of the habitat and presence/absence of a special-status species. The specific mitigation for project level impacts shall be determined on a case-by-case basis.				
<b>Mitigation Measure BIO-1.4:</b> Proposed projects within the Planning Area should avoid, if possible, construction within the general nesting season of February through August for avian species protected under Fish and Game Code 3500 and the Migratory Bird Treaty Act (MBTA), if it is determined that suitable nesting habitat occurs on a project site. If construction cannot avoid the nesting season, a pre-construction clearance survey shall be conducted by a qualified biologist to determine if any nesting birds or nesting activity is observed on or within 500-feet of a project site. If an active nest is observed during the survey, a biological monitor shall be on site to ensure that no proposed project activities would impact the active nest. A suitable buffer shall be established around the active nest until the	Prior to issuance of grading permits	Construction contractor, qualified biologist	Planning and Development	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>nestlings have fledged and the nest is no longer active. Project activities may continue in the vicinity of the nest only at the discretion of the biological monitor. Prior to commencement of grading activities and issuance of any building permits, the Director of the City of Fresno Planning and Development Department, or designee, shall verify that all proposed project grading and construction plans include specific documentation regarding the requirements of the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3503, that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field.</p>				
<p><b>Mitigation Measure BIO-2.1:</b> A pre-construction clearance survey shall be conducted by a qualified biologist to determine if a proposed project will result in the removal or impact to any riparian habitat and/or a special-status natural community with potential to occur in the Planning Area, compensatory habitat-based mitigation shall be required to reduce project impacts. Compensatory mitigation must involve the preservation or restoration or the purchase of off-site mitigation credits for impacts to riparian habitat and/or a special-status natural community. Mitigation must be</p>	<p>Prior to issuance of grading permits</p>	<p>Construction contractor, qualified biologist</p>	<p>Planning and Development</p>	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>conducted in-kind or within an approved mitigation bank in the region. The specific mitigation ratio for habitat-based mitigation shall be determined through consultation with the appropriate agency (i.e., CDFW or USFWS) on a case-by-case basis. The project applicant/developer for a proposed project shall develop and implement appropriate mitigation regarding impacts on their respective jurisdictions.</p>				
<p><b>Mitigation Measure BIO-2.2:</b> A pre-construction clearance survey shall be conducted by a qualified biologist to determine if a proposed project will result in significant impacts to streambeds or waterways protected under Section 1600 of Fish and Wildlife Code and Section 404 of the CWA. The project applicant/developer for a proposed project shall consult with partner agencies such as CDFW and/or USACE to develop and implement appropriate mitigation regarding impacts on their respective jurisdictions, determination of mitigation strategy, and regulatory permitting to reduce impacts, as required for projects that remove riparian habitat and/or alter a streambed or waterway. The project applicant/developer shall implement mitigation as directed by the agency with jurisdiction over the particular impact identified.</p>	<p>Prior to issuance of grading permits</p>	<p>Construction contractor, qualified biologist</p>	<p>Planning and Development</p>	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>• <b>Mitigation Measure BIO-2.3:</b> Prior to project approval, a pre-construction clearance survey shall be conducted by a qualified biologist to determine if a proposed project will result in project-related impacts to riparian habitat or a special-status natural community or if it may result in direct or incidental impacts to special-status species associated with riparian or wetland habitats. The project applicant/developer for a proposed project shall be obligated to address project-specific impacts to special-status species associated with riparian habitat through agency consultation, development of a mitigation strategy, and/or issuing incidental take permits for the specific special-status species, as determined by the CDFW and/or USFWS.</p> <p>Note: The practice of requiring pre-construction surveys as mitigation measures, rather than performing them during the environmental analysis stage, is typically accepted under CEQA regulations for several reasons:</p> <p>1. <b>Timing and Practicality:</b> Pre-construction surveys are often more accurate and effective when conducted closer to the start of construction activities. This timing ensures that the most current and relevant data about the</p>	<p>Prior to issuance of grading permits</p>	<p>Construction contractor, qualified biologist</p>	<p>Planning and Development</p>	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>presence of species or habitats are used in planning and mitigation efforts.</p> <p>2. Adaptive Management: Requiring surveys as a condition of approval allows for adaptive management. This means that mitigation measures can be tailored to the actual conditions found at the time of construction, which might differ from those identified during the initial environmental analysis.</p> <p>3. Case Law and Precedent: Several court decisions have upheld the deferral of specific surveys to the pre-construction phase as long as the mitigation measures clearly outline the steps to be taken if impacts are identified. The key requirement is that the MND provides a framework and commitment to conduct these surveys and implement appropriate mitigation measures based on their findings.</p> <p>a. Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 37</p> <p>b. Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296</p> <p>c. Riverwatch v. County of San Diego (1999) 76 Cal.App.4th 1428</p> <p>d. Defend the Bay v. City of Irvine (2004) 119 Cal.App.4th 1261</p>				

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<b>V. CULTURAL RESOURCES</b>				
<p><b>Mitigation Measure CUL-1:</b> If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-</p>	Prior to and during construction activities	Construction contractor, qualified historical resources specialist	Planning and Development	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
approved institution or person who is capable of providing long-term preservation to allow future scientific study.				
<b>Mitigation Measure CUL-3:</b> In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants	During construction activities	Construction contractor, qualified archaeologist	Planning and Development	

**Table A: Mitigation Monitoring and Reporting Program**

<b>MITIGATION MEASURE</b>	<b>Timing for Mitigation Measure</b>	<b>Mitigation Responsibility</b>	<b>Monitoring/ Reporting Agency</b>	<b>Verification (Initials and Date)</b>
regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.				
<b>VI. ENERGY</b>				
There are no significant impacts to Energy.				
<b>VII. GEOLOGY AND SOILS</b>				
<p><b>CUL-2:</b> Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed.</p> <p>If prehistoric resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that buried prehistoric archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified</p>	During construction activities	Construction contractor, qualified archaeologist	Planning and Development	



**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any prehistoric archaeological artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.</p> <p>If prehistoric resources are found during the field survey or literature review, the resources shall be inventoried using appropriate State record forms and submit the forms to the</p>				

**Table A: Mitigation Monitoring and Reporting Program**

<b>MITIGATION MEASURE</b>	<b>Timing for Mitigation Measure</b>	<b>Mitigation Responsibility</b>	<b>Monitoring/ Reporting Agency</b>	<b>Verification (Initials and Date)</b>
Southern San Joaquin Valley Information Center. The resources shall be evaluated for significance. If the resources are found to be significant, measures shall be identified by the qualified archaeologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring period shall be determined by the qualified archaeologist. If additional prehistoric archaeological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.				
<b>VIII. GREENHOUSE GAS EMISSIONS</b>				
There are no significant impacts to Greenhouse Gas Emissions.				
<b>IX. HAZARDS AND HAZARDOUS MATERIALS</b>				
There are no significant impacts to Hazards and Hazardous Materials.				
<b>X. HYDROLOGY AND WATER QUALITY</b>				
<b>Mitigation Measure HYD-3.1:</b> The City shall implement the following measures to reduce the impacts on the capacity of existing or planned	Ongoing. City and partnering agencies to	Fresno Metropolitan Flood Control	Fresno Metropolitan Flood Control	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>SDFCMP collection systems:</p> <ul style="list-style-type: none"> <li>o Coordinate with FMFCD to implement the existing Storm Drainage and Flood Control Master Plan (SDFCMP) for collection systems in drainage areas where the amount of imperviousness is unaffected by the change in land uses.</li> <li>o Coordinate with FMFCD to update the SDFCMP in those drainage areas where the amount of imperviousness increased due to the change in land uses to determine the changes in the collection systems that would need to occur to provide adequate capacity for the stormwater runoff from the increased imperviousness.</li> <li>o As development is proposed, implement current SDFCMP to provide stormwater collection systems that have sufficient capacity to convey the peak runoff rates from the areas of increased imperviousness.</li> <li>o Require developments that increase site imperviousness to install, operate, and maintain FMFCD approved on-site detention systems to reduce the peak runoff rates resulting from the increased imperviousness to the peak runoff rates that will not exceed the capacity of the existing stormwater collection systems.</li> </ul>	<p>ensure plans are approved consistent with existing Memorandum of Understanding prior to exceedance of capacity of existing retention basin facilities.</p>	<p>District (FMFCD), Planning and Development Department, and PW</p>	<p>District (FMFCD), Planning and Development Department, and PW</p>	
<p><b>Mitigation Measure HYD-3.2:</b> The City shall implement the following measures to reduce the</p>				

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>impacts on the capacity of existing or planned SDFCMP retention basins: Prior to approval of development projects, coordinate with FCMFCD to analyze the impacts to existing and planned retention basins to determine remedial measures required to reduce the impact on retention basin capacity to less than significant. Remedial measures would include:</p> <ul style="list-style-type: none"> <li>o Increase the size of the retention basin through the purchase of more land or deepening the basin or a combination for planned retention basins.</li> <li>o Increase the size of the emergency relief pump capacity required to pump excess runoff volume out of the basin and into adjacent canal that convey the stormwater to a disposal facility for existing retention basins.</li> <li>o Require developments that increase runoff volume to install, operate, and maintain, Low Impact Development (LID) measures to reduce runoff volume to the runoff volume that will not exceed the capacity of the existing retention basins.</li> </ul>				
<p><b>Mitigation Measure HYD-3.3:</b> The City shall implement the following measures to reduce the impacts on the capacity of existing or planned SDFCMP urban detention (stormwater quality) basins: Prior to approval of development projects, coordinate with FCMFCD to determine</p>	<p>Ongoing. City and partnering agencies to ensure plans are approved consistent with</p>	<p>Fresno Metropolitan Flood Control District (FMFCD), Planning and</p>	<p>Fresno Metropolitan Flood Control District (FMFCD), Planning and</p>	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>the impacts to the urban detention basin weir overflow rates and determine remedial measures required to reduce the impact on the detention basin capacity to less than significant. Remedial measures would include:</p> <ul style="list-style-type: none"> <li>o Modify overflow weir to maintain the suspended solids removal rates adopted by the FMFCD Board of Directors.</li> <li>o Increase the size of the urban detention basin to increase residence time by purchasing more land. The existing detention basins are already at the adopted design depth.</li> <li>o Require developments that increase runoff volume to install, operate, and maintain, Low Impact Development (LID) measures to reduce peak runoff rates and runoff volume to the runoff rates and volumes that will not exceed the weir overflow rates of the existing urban detention basins.</li> </ul>	<p>existing Memorandum of Understanding prior to exceedance of capacity of existing retention basin facilities.</p>	<p>Development Department, and PW</p>	<p>Development Department, and PW</p>	
<p><b>Mitigation Measure HYD-3.4:</b> The City shall implement the following measures to reduce the impacts on the capacity of existing or planned SDFCMP pump disposal systems:</p> <ul style="list-style-type: none"> <li>o Prior to approval of development projects, coordinate with FCMFCD to determine the extent and degree to which the capacity of the existing pump system will be exceeded.</li> <li>o Require new developments to install, operate, and maintain on-site detention</li> </ul>	<p>Ongoing. City and partnering agencies to ensure storm drainage plans are approved consistent with existing Memorandum of Understanding</p>	<p>Fresno Metropolitan Flood Control District (FMFCD), Planning and Development Department, and PW</p>	<p>Fresno Metropolitan Flood Control District (FMFCD), Planning and Development Department, and PW</p>	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>facilities, consistent with FMFCD design standards, to reduce peak stormwater runoff rates to existing planned peak runoff rates.</p> <ul style="list-style-type: none"> <li>o Provide additional pump system capacity to maximum allowed by existing permitting to increase the capacity to match or exceed the peak runoff rates determined by the SDFCMP.</li> </ul>	<p>prior to exceedance of capacity of existing pump disposal systems.</p>			
<p><b>Mitigation Measure UTL-1.1.1:</b> The City shall evaluate the water conveyance system and, at the time that discretionary projects are submitted for approval by the City, the City shall not approve development that would demand additional water and exceed the capacity of a facility until additional capacity is provided. The following capacity improvements shall be evaluated for potential environmental impacts and constructed by the City by approximately 2025.</p> <ul style="list-style-type: none"> <li>o Construct 65 new groundwater wells, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.</li> <li>o Construct a 2.0-million-gallon potable water reservoir (Reservoir T2) near the intersection of Clovis and California Avenues, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.</li> <li>o Construct a 4.0-million-gallon potable water reservoir (Reservoir T5) near the intersection of Ashlan and Chestnut Avenues, in</li> </ul>	<p>City to ensure that sufficient capacity exists within the existing water conveyance facilities prior to approving discretionary projects.</p>	<p>DPU</p>	<p>Planning and Development Department</p>	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.</p> <ul style="list-style-type: none"> <li>o Construct a 4.0-million-gallon potable water reservoir (Reservoir T6) near the intersection of Ashlan Avenue and Highway 99, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.</li> <li>o Construct 50.3 miles of regional water transmission mains ranging in size from 24-inch to 48-inch, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.</li> <li>o Construct 95.9 miles of 16-inch transmission grid mains in accordance with Chapter 9 and Figure 9- 1 of the 2014 Metro Plan Update.</li> </ul> <p>Prior to initiating construction of any of the capacity improvement projects identified above, the City shall conduct appropriate environmental analyses for each project to determine whether environmental impacts would occur.</p>				
<p><b>Mitigation Measure UTL-1.2.1:</b> The City shall evaluate the water supply system at the time discretionary projects are submitted and shall not approve development that would demand additional water until additional capacity is provided. By approximately the year 2025, the following capacity improvements shall be</p>	<p>City to ensure that sufficient capacity exists within the existing water conveyance facilities prior to</p>	<p>DPU</p>	<p>Planning and Development Department</p>	

**Table A: Mitigation Monitoring and Reporting Program**

<b>MITIGATION MEASURE</b>	<b>Timing for Mitigation Measure</b>	<b>Mitigation Responsibility</b>	<b>Monitoring/ Reporting Agency</b>	<b>Verification (Initials and Date)</b>
<p>evaluated for potential environmental impacts and constructed by the City.</p> <ul style="list-style-type: none"> <li>o Construct an approximately 30 mgd expansion of the existing northeast surface water treatment facility for a total capacity of 60 mgd, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.</li> <li>o Construct an approximately 20 mgd surface water treatment facility in the southwest portion of the City, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update.</li> </ul> <p>Construct a 25,000 AF/year recycled water facility as an expansion to the RWRF in accordance with the January 2014 City of Fresno Metropolitan Water Resources Management Plan. This improvement is required after the year 2025.</p>	<p>approving discretionary projects.</p>			
<b>XI. LAND USE AND PLANNING</b>				
There are no significant impacts to Land Use and Planning.				
<b>XII. MINERAL RESOURCES</b>				
There are no significant impacts to Mineral Resources.				
<b>XIII. NOISE</b>				
<p><b>Mitigation Measure NOI-1:</b> Installation of Temporary Noise Barriers: Prior to the commencement of construction activities, the contractor shall install temporary noise barriers along the western and southern perimeters of the construction site, adjacent to the residential</p>	<p>Prior to issuance of grading permits, during project construction</p>	<p>Construction contractor</p>	<p>Planning and Development</p>	



**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>areas.</p> <ul style="list-style-type: none"> <li>The noise barriers shall be a minimum of 12 feet in height and constructed of materials with a minimum Sound Transmission Class (STC) rating of 25. Suitable materials include plywood, mass-loaded vinyl, or other acoustically equivalent materials.</li> <li>The noise barriers shall be continuous along the western and southern boundaries of the construction area, ensuring there are no gaps or openings that would allow noise to pass through. The barriers shall extend sufficiently beyond the construction area to ensure maximum noise attenuation for the residential areas.</li> <li>The contractor shall regularly inspect and maintain the noise barriers to ensure their effectiveness throughout the construction period. Any damage or gaps in the barriers shall be repaired promptly.</li> <li>This mitigation measure shall be implemented prior to the start of construction and maintained throughout the entire construction period.</li> </ul>				
<p><b>Mitigation Measure NOI-2:</b> The project contractor shall implement the following measures during construction of the project:</p> <ul style="list-style-type: none"> <li>Equip all construction equipment, fixed or</li> </ul>	Planning and Development	Construction contractor	Construction contractor	

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mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. <ul style="list-style-type: none"> <li>Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.</li> <li>Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities.</li> <li>Ensure that all general construction-related activities are restricted to between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday. No construction shall occur on Sunday.</li> </ul>				
<b>XIV. POPULATION AND HOUSING</b>				
There are no significant impacts to Population and Housing.				
<b>XV. PUBLIC SERVICES</b>				
There are no significant impacts to Public Services.				
<b>XVI. RECREATION</b>				
There are no significant impacts to Recreation.				
<b>XVII. TRANSPORTATION</b>				
There are no significant impacts to Transportation.				
<b>XVII. TRIBAL CULTURAL RESOURCES</b>				
<b>Mitigation Measure CUL-1.1:</b> If previously	Prior to and	Construction	Planning and	

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<p>unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future</p>	<p>during construction activities</p>	<p>contractor, qualified archaeologist</p>	<p>Development</p>	

**Table A: Mitigation Monitoring and Reporting Program**

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
scientific study.				
<p><b>Mitigation Measure CUL-3:</b> In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple</p>	Prior to and during construction activities	Construction contractor, qualified archaeologist	Planning and Development	

**Table A: Mitigation Monitoring and Reporting Program**

<b>MITIGATION MEASURE</b>	<b>Timing for Mitigation Measure</b>	<b>Mitigation Responsibility</b>	<b>Monitoring/ Reporting Agency</b>	<b>Verification (Initials and Date)</b>
<p>human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.</p> <p>In conclusion, the Project will not result in any impacts to tribal cultural resources beyond those analyzed in City of Fresno General Plan PEIR.</p>				
<b>XIX. UTILITIES AND SERVICE SYSTEMS</b>				
There are no significant impacts to Utilities and Service Systems.				
<b>XX. WILDFIRE</b>				
There are no significant impacts to Wildfire.				
<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
There are no significant impacts related to Mandatory Findings of Significance.				

Source: LSA (April 2023).