INITIAL STUDY/NEGATIVE DECLARATION
[Pursuant to Public Resources Code Section 21080(c) and California Code of Regulations, Title 14, Sections 15070-15071]

LEAD AGENCY: San Joaquin County Community Development Department

PROJECT APPLICANT: Kevin Huber

PROJECT TITLE/FILE NUMBER(S): PA-2200087; -88

PROJECT DESCRIPTION: A Zone Reclassification to reclassify the zoning of a 4.96-acre parcel from AG-40 (General Agriculture, 40-acre minimum) to I-W (Warehouse). The underlying project, a Site Approval for truck parking, is submitted concurrently. The project proposes a 4,900 square foot shop, to include a restroom and breakroom, and parking for 96 semi-trailer trucks. (Use Type: Truck Sales & Services – Parking)

The project site is located on the east side of N. Thornton Road, 1,300 feet north of State Route 12, Lodi.

ASSESSORS PARCEL NO(S).: 025-190-31

ACRES: 4.96 acres

GENERAL PLAN: I/L

ZONING: AG-40

POTENTIAL POPULATION, NUMBER OF DWELLING UNITS, OR SQUARE FOOTAGE OF USE(S):
4,900 square foot shop and 160,000 square feet of paving for truck parking.

SURROUNDING LAND USES:

NORTH: Agricultural with scattered residences
SOUTH: Commercial – Freeway Services zone; State Route 12; Flag City Complex
EAST: Agricultural with scattered residences
WEST: Commercial – Freeway Services zone; Interstate 5

REFERENCES AND SOURCES FOR DETERMINING ENVIRONMENTAL IMPACTS:

Original source materials and maps on file in the Community Development Department including: all County and City general plans and community plans; assessor parcel books; various local and FEMA flood zone maps; service district maps; maps of geologic instability; maps and reports on endangered species such as the Natural Diversity Data Base; noise contour maps; specific roadway plans; maps and/or records of archeological/historic resources; soil reports and maps; etc.

Many of these original source materials have been collected from other public agencies or from previously prepared EIR's and other technical studies. Additional standard sources which should be specifically cited below include on-site visits by staff (note date); staff knowledge or experience; and independent environmental studies submitted to the County as part of the project application. Copies of these reports can be found by contacting the Community Development Department.

TRIBAL CULTURAL RESOURCES:

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

No

GENERAL CONSIDERATIONS:

1. Does it appear that any environmental feature of the project will generate significant public concern or controversy?

   ☐ Yes ☒ No

   Nature of concern(s): Enter concern(s).

2. Will the project require approval or permits by agencies other than the County?

   ☐ Yes ☒ No

   Agency name(s): Enter agency name(s).

3. Is the project within the Sphere of Influence, or within two miles, of any city?

   ☐ Yes ☒ No

   City: Enter city name(s).

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.

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

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation:

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

☒ 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.

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

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" 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 **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** 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.

Alisa Gallant
Signature

12-16-2022
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) 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).

2) 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.

3) 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.

4) "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 (5) below, may be cross-referenced).

5) 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 an 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.

6) 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.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

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 significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
I. AESTHETICS.					
Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐	☐

Impact Discussion:

a) San Joaquin County is set within the greater Central Valley, composed of large expanses of generally flat, agricultural lands and urban development, and framed by the foothills of the Diablo Range to the west and the foothills of the Sierra Nevada to the east. According to the County's General Plan, scenic resources within the County include waterways, hilltops, and oak groves (County of San Joaquin 2035).

The project includes a proposal to reclassify the zoning of a 4.96-acre parcel from AG-40 (General Agriculture, 40-acre minimum) to I-W (Warehouse Industrial) and to develop the parcel for truck parking. The project site is located on N. Thornton Road, 1,300 feet north of State Highway 12, one-half mile from Interstate 5, and north of the Flag City Complex which is developed with trucking services, fast-food restaurants, and an RV Park. To the north of the property, the area is relatively flat, with agricultural uses and scattered residences. Because the site is at the edge of existing development, and because any scenic vista would be north of this area, the project's impact on a scenic vista is expected to be less-than-significant.

b) There are two officially designated state scenic highways in San Joaquin County: I-580 and I-5 (County of San Joaquin 2035). I-580 is located approximately 40.0 miles southwest of the project site. Due to distance, the project site is not visible from 1-580. I-5 is located approximately 0.25 miles west of the project site. The project will convert an agricultural field to an industrial use however, the site is not visible from I-5 and therefor is not expected to impact scenic resources.

In addition, the County has designated 26 roadways within the County as local scenic routes (County of San Joaquin 2035). The project site is located on N. Thornton Road, the section of which is not a designated scenic route. The nearest locally designated scenic route is a section of Eight Mile Road, located approximately 4.5 miles south of the project site, which, due to distance, does not have a view of the project site. Therefore, the project would have a less-than-significant impact associated with scenic resources within a state- or locally- designated scenic route.

c) The project site is located north of State Route 12 and the Flag City Complex. Flag City is a development of truck services and camping, with eating establishments and other related services and the proposed project will not conflict with applicable zoning or other regulations. The area is generally flat and there are no particular vantage points. The site is adjacent to agricultural uses to the north and east and truck services to the south and west. Therefore, the project would have a less-than-significant impact associated with the existing visual quality or character of the site or its surroundings.

d) The existing lighting and glare conditions in the project area are typical of an area with 24-hour services. New lighting

for the project would include outdoor building lighting and parking lot lighting. Parking lot lighting standards stipulate that all lighting be designed to confine direct rays to the premises, with no spillover beyond the property line except onto public thoroughfares, provided that such light does not cause a hazard to motorists (Development Title Section 9-1015.5). Therefore, the project is expected to have a less than significant impact from new sources of light or glare on day or nighttime views in the area.

II. AGRICULTURE AND FORESTRY RESOURCES.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
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 a nonagricultural use?	☐	☒	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐

Impact Discussion:

a) The project includes a proposal to reclassify the zoning of the 4.96-acre parcel from AG-40 (General Agriculture, 40-acre minimum) to I-W (Warehouse Industrial). The parcel is classified as Prime Farmland and Unique Farmland on maps provided by the California Department of Conservation's Farmland Mapping and Monitoring Program. When changing the permitted land use of a parcel from an agricultural to a nonagricultural land use, the San Joaquin County Development Title regulations require that agricultural mitigation be satisfied (Development Title Section 9-1080). Agricultural mitigation shall be satisfied by granting a farmland conservation easement or other farmland conservation mechanism set forth in Section 9-1080 of the Development Title. The number of acres of agricultural mitigation land shall be at least equal to the number of acres that will be changed to a nonagricultural use. Final approval of any project subject to agricultural mitigation is contingent upon the execution of the legal instrument to provide agricultural mitigation land and payment of the administrative fee, or approval and payment of an in-lieu fee. Issuance of a building or grading permit for the parcel will require submission of the required legal instrument. Therefore, with the required mitigation, the

impact of the project's conversion of Prime Farmland, Unique Farmland, or Farmland of State Importance to a nonagricultural use will be less than significant.

b) The project includes a proposal to reclassify the zoning of the 4.96-acre parcel from AG-40 (General Agriculture, 40-acre minimum) to I-W (Warehouse Industrial) to allow the truck parking use type. Truck parking would not be permitted in the existing AG-40 zoning but will not conflict with I-W zoning if approved. Additionally, the parcel is not under a Williamson Act contract. Therefore, the project will not conflict with existing zoning for agricultural use, nor will it conflict with a Williamson Act contract.

c-d) There are no forest resources or zoning for forestlands or timberland, as defined by Public Resources Code and Government Code, located on or near the project site, therefore, the project will have no impact on corresponding zoning or conversion of such land.

e) See answer a).

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

Impact Discussion:

a-d) The project includes a proposal to reclassify the zoning of the 4.96-acre parcel from AG-40 (General Agriculture, 40-acre minimum) to I-W (Warehouse Industrial) to allow truck parking. The project site is located within the San Joaquin Valley Air Basin which lies within the jurisdiction of the San Joaquin Valley Air Pollution Control District (APCD). APCD is the local agency established by the State to regulate air quality sources and minimize air pollution.

The project was referred to APCD for review on May 11, 2022. APCD issued a response dated June 9, 2022, with recommendations to reduce project impacts on air quality, including utilizing the cleanest available off-road construction equipment, including the latest tier equipment, during construction, and, during project operation, complying with the state's Heavy-Duty idling regulation that limits vehicle idling to specific time limits.

APCD also recommended additional analysis estimating potential emissions and emission sources, both constructional and operational. The applicant responded to the recommendation by engaging an environmental analyst to perform an air analysis. The analyst used the California Emissions Estimator Model to estimate the proposed project's construction- and operation-related mobile source air pollutant emissions. The results of the analysis of emissions indicate emissions from the project will not exceed the applicable screening thresholds recommended by the Valley Air District.

Because these types of trucking activities can result in potentially significant health impacts to sensitive receptors within 1,000 feet of these activities, it is important to note that the nearest sensitive receptor is a Recreational Vehicle Park located 1,600 feet south of the project site. Pursuant to the analysis, because of air pollution dispersion, any trucking-related emissions generated from the proposed project site would not be expected to have a localized impact on the nearest sensitive receptors 1,600 feet (0.3 miles) away from the project site.

With implementation of the District Rules' requirements and implementation of recommends, the project's impact on air quality is expected to be less than significant.

IV. BIOLOGICAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
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?	☐	☒	☐	☐	☐
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?	☐	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐	☐
d) Interfere substantially with the movement of any 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?	☐	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐	☐

Impact Discussion:

a-f) The California Department of Fish and Wildlife Natural Diversity Database lists *Buteo Swainsoni* (Swainson's hawk), *Thamnophis gigas* (giant garter snake), *Emys marmorata* (western pond turtle), *laterallus jamaicensis* (California black rail), Coastal and Valley freshwater marsh, *Lepidurus packardii* (vernal pool tadpole shrimp), *Hibiscus lasiocarpus* (rose-mallow), and *Scutallaria lateriflora* (blue skullcap) as rare, endangered, or threatened species or habitat located within a two-mile radius of the site for the proposed project. Referrals have been sent to the San Joaquin Council of Governments (SJCOG), the agency responsible for verifying the correct implementation of the *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* (SJMSCP), which provides compensation for the conversion of Open Space to non-Open Space uses which affect the plant, fish and wildlife species covered by the Plan. Pursuant to the Final EIR/EIS for SJMSCP, dated November 15, 2000, and certified by SJCOG on December 7, 2000, implementation of the SJMSCP is expected to reduce impacts to biological resources resulting from the proposed project to a level of less-than-significant.

SJCOG responded to this project referral in a letter dated May 11, 2022, that the project is subject to the SJMSCP. The applicant has confirmed that he will participate in SJMSCP. With the applicant's participation, the proposed project is consistent with the SJMSCP and any impacts to biological resources resulting from the proposed project will be reduced to a level of less-than-significant.

V. CULTURAL RESOURCES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to§ 15064.5?	☐	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐	☐

Impact Discussion:

a-c) The proposed project includes a proposal to reclassify the zoning of a 4.96-acre parcel from AG-40 (General Agriculture, 40-acre minimum) to I-W (Warehouse Industrial) and to develop the parcel for truck parking. The site was formerly used for crop production and has not been previously developed.

A search of the National Register of Historic Places, the Office of Historic Preservation's list of California Historical Resources, and of the Register of Historic Places within San Joaquin County did not uncover any known historical resources on or near the project site as defined in CEQA Guidelines Section 15064.5.

In the event human remains are encountered during any portion of the project, California state law requires that there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county has determined manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation (California Health and Safety Code - Section 7050.5). At the time development, if Human burials are found to be of Native American origin, the developer shall follow the procedures pursuant to Title 14, Division 6, Chapter 3, Article 5, Section 15064.5(e) of the California State Code of Regulations.

In this way, the project would have a less-than-significant impact with regard to an adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

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

Impact Discussion:

a-b) The California Energy Code (also titled The Energy Efficiency Standards for Residential and Non-residential Buildings) was created by the California Building Standards Commission in response to a legislative mandate to reduce California's energy consumption. The code's purpose is to advance the state's energy policy, develop renewable energy sources and prepare for energy emergencies. The code includes energy conservation standards applicable to most buildings throughout California. These requirements will be applicable to the proposed project ensuring that any impact to the environment due to wasteful, inefficient, or unnecessary consumption of energy will be less than significant and preventing any conflict with state or local plans for energy efficiency and renewable energy.

VII. GEOLOGY AND SOILS.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
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.	☐	☐	☒	☐	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	☐
iv) Landslides?	☐	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	☐
d) Be located on expansive soil and create direct or indirect risks to life or property?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒	☐

Impact Discussion:

a) According to the California Department of Conservation's California Geological Survey, the project site is not located within an earthquake fault zone. However, similar to other areas located in seismically active Northern California, the project area is susceptible to strong ground shaking during an earthquake, although the site would not be affected by ground shaking more than any other area in the region.

The Project would be required to comply with the most recent version of the California Building Code (CBC), which contains universal standards related to seismic load requirements and is codified within the San Joaquin County Ordinance Code under Section 8-1000. In addition, a soils report is required pursuant to CBC § 1803 for foundations and CBC appendix § J104 for grading. All recommendations of the Soils Report will be incorporated into the construction drawings. As a result, impacts associated with seismic ground shaking or possible ground liquefaction are expected to be less than significant.

The project site is located in an area that is relatively flat and does not contain any slopes that could result in landslides. Therefore, impacts associated with landslides are expected to be less than significant.

b) The project would not result in substantial soil erosion or the loss of topsoil because the project will require a grading permit in conjunction with a building permit. Therefore, the grading will be done under permit and inspection by the San Joaquin County Community Development Department's Building Division. As a result, impacts to soil erosion or loss of topsoil will be less than significant.

c) As part of the project design process, a soils report will be required for grading and foundations and all recommendations from a soils report must be incorporated into the construction plans. As a result of these grading recommendations, which are required by the California Building Code (CBC), the project would not be susceptible to the effects of any potential lateral spreading, subsidence, or liquefaction. Compliance with the CBC and the engineering recommendations in the site-specific soils report would ensure structural integrity in the event that seismic-related issues are experienced at the project site. Therefore, impacts associated with unstable geologic units are expected to be less than significant.

d) The Soil Survey of San Joaquin County does not classify the project site soil as expansive. As a result, the effects of expansive soil on the project buildings are expected to be less than significant.

e) The project will be served by an onsite septic system for the disposal of wastewater. The Environmental Health Department is requiring a soil suitability/nitrate loading study to determine the appropriate system and design prior to issuance of building permit(s). The sewage disposal system shall comply with the onsite wastewater treatment systems standards of San Joaquin County. A percolation test that meets absorption rates of the manual of septic tank practice or E.P.A. Design Manual for onsite wastewater treatment and disposal systems is required for each parcel. With these standards in place, only soils capable of adequately supporting the use of septic tanks will be approved for the septic system. As a result, impacts to soils from wastewater are expected to be less than significant.

f) The project area has not been determined to contain significant historic or prehistoric archeological artifacts that could be disturbed by project construction, therefore, damage to unique paleontological resources or sites or geologic features is expected to be less than significant.

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

Impact Discussion:

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

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e$/yr).

As noted previously, the proposed project will be subject to the rules and regulations of the SJVAPCD. The SJVAPCD has adopted the *Guidance for Valley Land- use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* and the *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency.**1*** The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. To be determined to have a less-than-significant individual and cumulative impact with regard to GHG emissions, projects must include BPS sufficient to reduce GHG emissions by 29 percent when compared to Business As Usual (BAU) GHG emissions. Per the SJVAPCD, BAU is defined as projected emissions for the 2002-2004 baseline period. Projects which do not achieve a 29 percent reduction from BAU levels with BPS alone are required to quantify additional project-specific reductions demonstrating a combined reduction of 29 percent. Potential mitigation measures may include, but not limited to: on-site renewable energy (e.g. solar photovoltaic systems), electric vehicle charging stations, the use of alternative-fueled vehicles, exceeding Title 24 energy efficiency standards, the installation of energy-efficient lighting and control systems, the installation of energy-efficient mechanical systems, the installation of drought-tolerant landscaping, efficient irrigation systems, and the use of low-flow plumbing fixtures.

It should be noted that neither the SJVAPCD nor the County provide project-level thresholds for construction-related GHG emissions. Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. As such, the analysis herein is limited to discussion of long-term operational GHG emissions.

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1 San Joaquin Valley Air Pollution Control District. *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*. December 17, 2009.San Joaquin Valley Air Pollution Control District. *District Policy Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. December 17, 2009.

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

Impact Discussion:

a-c) Pursuant to the Hazardous Materials Disclosure Survey submitted with the application, there will not be any storage of hazardous materials on site. Regulations related to the storage of hazardous materials require the owner/operator to report the use or storage of these hazardous materials to the California Environmental Reporting System (CERS) and must comply with all applicable federal, state, and local regulations pertaining to the storage of hazardous materials. In this way, impacts related to the use, transport, or disposal of hazardous materials are expected to be less than significant.

d) The project site is not listed as a hazardous materials site on the California Department of Toxic Substances Control EnviroStor database map, compiled pursuant to Government Code 65962.5 and, therefore, will not result in creating a significant hazard to the public or the environment.

e) The project site is located within the Kingdon Airpark area of influence (AIA) Zone 8 and is approximately 2 miles northwest of the airport runway. Pursuant to the San Joaquin County Airport Land Use Compatibility Plan (Amended 2018), the current noise exposure contour and the future noise exposure contour are approximately 1.5 miles away

from the project site. Additionally, although Kingdon Airpark does not have any formal noise abatement procedures, it has taken steps to encourage pilots to avoid noise-sensitive land uses by using the following procedure: climb runway heading to 800 feet above ground level (AGL), then left turn to 270 degrees before normal departure procedures. This noise abatement procedure is posted on a sign at the end of the runway. Additionally, the airport has specified run-up areas, located at the southern end of the airport, in an effort to minimize their impact on nearby land uses. Therefore, due to the project site's distance from the airport noise contours and the airpark's recommendations to pilots in order to abate noise, the project's risk of exposing people residing or working in the project area to safety hazards or excessive noise is less than significant.

f) The County of San Joaquin Emergency Operations Plan is an all-hazards document describing the County's incident management structure, compliance with relevant legal statutes, other relevant guidelines, whole community engagement, continuity of government focus, and critical components of the incident management structure. According to the Emergency Operations Plan, major transportation route I-5, would be a possible evacuation route in the event of an emergency. The Project would not affect this route, and moreover, the Project would not affect the County's ability to implement its Emergency Operations Plan in the event of an emergency. Notwithstanding, the Project would not impede access to any public route that might be needed as an evacuation route. As a result, the Project's impact on emergency response or evacuation activities is expected to be less than significant.

g) The project location is not identified as a Community at Risk from Wildfire by Cal Fire's "Fire Risk Assessment Program". Communities at Risk from Wildfire are those places within 1.5 miles of areas of High or Very High wildfire threat as determined from CDF-FRAP fuels and hazard data. Therefore, the impact of wildfires on the project are expected to be less than significant.

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

Impact Discussion:

a) The proposed project's impact on hydrology and water is expected to be less than significant. The project, a zone reclassification for a truck parking facility, will be served by a public water system and a private, onsite septic system. Construction of a sewage disposal system will be under permit and inspection by the Environmental Health Department to ensure that it complies with the onsite wastewater treatment systems standards of San Joaquin County.

For stormwater discharges associated with construction activity in the State of California, the State Water Resources Control Board (SWRCB) has adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs 1 acre or more of soil. Because land disturbance for this project would exceed one acre, the project applicant would be required to obtain coverage under the Construction General Permit issued by the SWRCB prior to the start of construction. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would include and specify water quality Best Management Practices (BMPs) designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off site into receiving waters.

Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the State Water Resources Control Board (SWRCB).

During project operation, stormwater quality is regulated by the Stormwater Quality Control Criteria Plan (SWQCCP), which sets standards that apply to all new development. As part of the project, a new engineered stormwater drainage system would be designed and constructed to collect and treat all on-site stormwater in a method that meets the requirements of the SWQCCP.

In summary, project construction would be completed in accordance with an NPDES-mandated SWPPP, which would include standard BMPs to reduce potential off-site water quality impacts related to erosion and incidental spills and hazardous substances from equipment. Surface water runoff during project operations would be managed through an engineered stormwater drainage system, as required by the SWQCCP. Therefore, impacts associated with water quality standards, waste discharge requirements, and surface water or groundwater quality are expected to be less than significant.

b) The proposed project, a zone reclassification and the development of a truck parking facility, proposes developing all of the 4.96-acre parcel with paved parking for 96 semi-truck trailers. The site will receive storm water drainage through County Service Area 31. Stormwater is collected in a retention pond located 1,100 feet west of the site and allowed to percolate into the ground Therefore, although development of the site will create impervious areas equal to the size of the parcel, with the stormwater system returning stormwater to the ground, the project's interference with groundwater recharging is expected to be less than significant.

c) The construction of the proposed project would result in grading and soil-disturbing activities and the installation of new impervious surfaces. A grading permit will be required which requires plans and grading calculations, including a statement of the estimated quantities of excavation and fill, prepared by a Registered Design Professional. The grading plan must show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work and show in detail that it complies with the requirements of the California Building Code (CBC). The plans must also show the existing grade on adjoining properties in sufficient detail to identify how grade changes will conform to the requirements of the CDC. A drainage plan must be submitted for review and approval, prior to release of a building permit. In this way, any impacts to the existing drainage pattern of the site will be less than significant.

d) The flood zone information contained on the San Joaquin County Flood Information viewer is provided using the Digital Flood Insurance Rate Map data received from the US Department of Homeland Security, Federal Emergency Management Agency (FEMA). Pursuant to this information, the area containing the project site is in a zone with 0.2% annual chance (500-year) flood; or area of 1% annual chance (100-year) flood. with average depths of less than 1 foot or with drainage areas less than 1 square mile. Development of this project will require compliance with Development Title Section 9-1605 regarding flood hazards

The project site is not located in a tsunami nor a seiche zone. With the requirements for building above the flood depth, the risk of release of pollutants due to inundation of the project site is expected to be less than significant.

e) The applicant will apply for permits from the Central Valley Regional Water Quality Control Board (CVRWQCB) to protect surface and groundwater on site and to ensure that the project doesn't conflict or obstruct a water quality control plan or sustainable groundwater management plan.

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

Impact Discussion:

a) The proposed project is a zone reclassification and development of a truck parking facility for 96 semi-truck trailers. The project does not include construction of any feature that would impair mobility within an existing community, nor does it include removal of a means of access between a community and outlying area. The project site is not used as a connection between established communities. Instead, connectivity with the area surrounding the project is facilitated via local roadways. Therefore, the project will not result in dividing an established community.

b) The project proposes rezoning a parcel with the General Agriculture, 40-acre minimum (AG-40) zoning to Warehouse Industrial (I-W) to allow development of a truck parking facility. Truck parking is a permitted use in the I-W zone with an approved Site Approval application therefore, if the rezoning is approve, the proposed use will be consistent with all land use policies and regulations of the County Development Code and 2035 General Plan, therefore, the project's impact on the environment due to land use conflict is expected to be less than significant.

XII. MINERAL RESOURCES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
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?	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐

Impact Discussion:

a-b) Pursuant to the San Joaquin County General Plan Background Report, Chapter 10 - Natural Resources, the primary extractive resource in San Joaquin County is sand and gravel, with the principal areas of sand and gravel extraction located in the southwestern part of the county and along the Mokelumne, Calaveras, and Stanislaus rivers in the eastern portion of the county. The project site is located in the northwest portion of the county and pursuant to the California Geological Survey (CGS), the project site is in an unclassified area. However, the surrounding area has either been developed or used for agriculture without any mineral resource discoveries. Therefore, the project's impact on the loss of important minerals is expected to be less than significant.

XIII. NOISE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
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?	☐	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	☐
c) For a project 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?	☐	☐	☒	☐	☐

Impact Discussion:

a-b) The project site is located on N. Thornton Road, just north of State Route 12 and the Flag City Complex, approximately 550 feet from Interstate 5. The site is adjacent to the noise contour of N. Thornton Road. Traffic on State Route 12 and Interstate 5 results in existing noise levels that exceed the County's noise standards. Additionally, the project area is developed with trucking and other industrial uses. The project will result in a temporary increase in ambient noise level associated with project construction activities to include grading and use of heavy machinery and equipment. The operation of the truck parking facility will contribute to the area ambient noise level. However, persons on the project site will be there only for the time required to remove or park a truck, limiting exposure to any elevated noise levels. Additionally, truck uses can contribute to ground-borne vibrations however, not to an excessive level. Therefore, noise impacts from the proposed project and impacts on vibrations are expected to be less than significant.

c) The project site is located within the Kingdon Airpark area of influence (AIA) Zone 8 and is approximately 2 miles northwest of the airport runway. Pursuant to the San Joaquin County Airport Land Use Compatibility Plan (Amended 2018), the current noise exposure contour and the future noise exposure contour are approximately 1.5 miles away from the project site. Additionally, although Kingdon Airpark does not have any formal noise abatement procedures, it has taken steps to encourage pilots to avoid noise-sensitive land uses by using the following procedure: climb runway heading to 800 feet above ground level (AGL), then left turn to 270 degrees before normal departure procedures. This noise abatement procedure is posted on a sign at the end of the runway. Additionally, the airport has specified run-up areas, located at the southern end of the airport, in an effort to minimize their impact on nearby land uses. Therefore, due to the project site's distance from the airport noise contours and the airpark's recommendations to pilots in order to abate noise, the project's potential for exposing future workers at the project site to excess noise levels and impacts resulting from airport noise levels to people residing or working in the project area are expected to be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
XIV. POPULATION AND HOUSING.					
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)?	☐	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐	☐

Impact Discussion:

a-b) The project will not induce substantial population growth in the area either directly or indirectly because the project is not anticipated to result in an increase in the number of jobs available. The proposed project would not displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere because no residences will be removed. Although the zoning is proposed to change the parcel's zone from an agriculture zone, which permits a residential use, to an industrial zone that does not permit a residential use, the parcel would be permitted a maximum of 3 residences, which is not significant. Therefore, the project's impact on population and housing is expected to be less than significant.

XV. PUBLIC SERVICES.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire protection?	☐	☐	☒	☐	☐
Police protection?	☐	☐	☒	☐	☐
Schools?	☐	☐	☒	☐	☐
Parks?	☐	☐	☐	☒	☐
Other public facilities?	☐	☐	☐	☒	☐

Impact Discussion:

a) The project site is located in unincorporated San Joaquin County west of the City of Lodi. The site is located in the Woodbridge Fire District, which provides fire, rescue, and emergency medical services to the rural communities of Woodbridge, Acampo, Lodi, Forest Lake, Flag City, and Tower Park. The district covers approximately 197 square miles and 500 nautical miles in the Delta and serves an approximate population of 15,000, with major highways including State Route 99, Interstate 5, and State Route 12. The district maintains 4 fire stations and staffs 4 engine companies through the staff of 1 chief, 1 administrative officer, 3 captains, 9 lieutenants, 5 firefighters, and 11 firefighter trainees. Annual calls average approximately 2,000.

Police protection services are provided to the project area by the San Joaquin County Sheriff's Office. The Sheriff's Office employs over 800 sworn and support personnel. The project site is located within the Lodi Unified School District. With 50 schools and 2,500 employees, the school district spans 350 square miles and provides learning opportunities to over 28,000 students in Lodi, Stockton, and surrounding county areas. There are no public recreation facilities near the project site.

The public service agencies listed above were provided with the project proposal and invited to respond with any project concerns or conditions. No agencies responded with conditions or concerns. Therefore, the project is not expected to have a significant impact on the ability of these service providers to maintain current levels of service and the project's impact on these services is expected to be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
XVI. RECREATION.					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	☐

Impact Discussion:

a-b) The project is not expected to result in a large number of employees nor is there any residential development as part of the project. Therefore, the project is not expected to result in an increase in demand for neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, because the project will not generate any new residential units and the project, an expansion of an existing winery, is not expected to result in an increased demand for recreational facilities. Therefore, the project will have no impact on recreation facilities.

XVII. TRANSPORTATION.

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

Impact Discussion:

a) The project site is located on N. Thornton Road, just north of State Route 12 and the Flag City Complex, approximately 550 feet from Interstate 5. The main access to the project site is proposed from N. Thornton Road, a county-maintained road. Regional access to the site is provided by Interstate 5, a north-south roadway. State Route 12 provides a west-east nexus to the project site.

The project was referred to the Department of Public Works. The Department responded with conditions for the applicant to improve the driveway approach in accordance with the requirements of San Joaquin County Improvement Standards Drawing No. R-13 providing return radii for truck-trailer egress designed to prevent encroachment onto opposing lanes of traffic. Required frontage (roadway) improvements to Thornton Road must be constructed in conformance with the standards for one-half of an 84-foot wide right-of-way Minor Arterial road. Improvement plans, specifications and engineer's estimate prepared by a registered civil engineer must be submitted for review and are subject to plan check and field inspection fees and must be approved by the County of San Joaquin Department of Public Works prior to issuance of a building permit.

In the project vicinity, due to the rural nature of the area, most of the roadways lack sidewalks and crosswalks. Bicycle facilities do not currently exist in the project vicinity. There is no transit service within the project vicinity.

To conclude, with the required roadway frontage improvements, impacts from the project on the circulation system, including transit, roadways, bicycle, and pedestrian facilities is expected to be less than significant.

b) The project proposes a truck parking facility for 96 semi-truck trailers. The Department of Public Works determined that a traffic study is not required because the proposed project is not expected to exceed 50 vehicle trips during any hour and would have a less than significant traffic impacts. A project that is expected to generate less than 110 automobile trips per day and, therefore, is considered a small project according to the Technical Advisory on Evaluating Transportation Impacts in CEQA, as published by the California Office of Planning and Research (OPR) in December 2018. According to this OPR guidance, a small project that generates or attracts "fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact" with regards to Vehicle Miles Traveled (VMT)." Therefore, the project is expected to be consistent with the CEQA Guidelines related to vehicle miles traveled (VMT).

c) The Department of Public Works will require the applicant to improve the driveway approach in accordance with the requirements of San Joaquin County Improvement Standards Drawing No. R-13 providing return radii for truck-trailer egress designed to prevent encroachment onto opposing lanes of traffic. With these improvements, the project's impact on transportation hazards is expected to be less than significant.

d) The project site would be accessed from N. Thornton Road. A driveway and circulation route that meets the San Joaquin County Fire Chiefs' Association guidelines for providing fire apparatus access as required by the California Fire Code (CFC) is required. Therefore, site access will provide adequate space for fire trucks and emergency vehicles to enter and turn around, and the project's impact on emergency access is expected to be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
XVIII. TRIBAL CULTURAL RESOURCES.					
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	☐	☐	☐	☒	☐
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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐	☐

Impact Discussion:

a)

i) The project site is undeveloped, therefore no buildings are listed on the State Office of Historic Preservation California Register or the National Register of Historic Places. Therefore, the project will not result in a substantial adverse change in the significance of a historical resource as defined by CEQA.

ii) The project proposes to rezone an agricultural parcel to the Warehouse Industrial zone (I-W) in order to develop a truck parking facility. At the time of development, if human remains are encountered, all work shall halt in the vicinity and the County Coroner shall be notified immediately. At the same time, a qualified archaeologist shall be contacted to evaluate the finds. If Human burials are found to be of Native American origin, steps shall be taken pursuant to Section 15064.5(e) of Guidelines for California Environmental Quality Act.

XIX. UTILITIES AND SERVICE SYSTEMS.

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

Impact Discussion:

a) The project proposes to rezone an agricultural parcel to the Warehouse Industrial zone (I-W) in order to develop a truck parking facility. The project proposes utilizing an onsite wastewater treatment system. Water and storm water drainage is provided by County Service Area 31 (CSA 31), a public system. CSA 31 has provided will serve letters stating that CSA 31 has the capacity to serve the proposed project. Therefore, the project will be served by private, onsite services and will not require relocation of existing facilities or require new facilities.

b) The project site is served with a public water system provided by County Service Area 31 (CSA 31). CSA 31 has provided will serve letters stating that CSA 31 has the capacity to serve the proposed project. Therefore, the project appears to have a sufficient supply of water.

c) The project will utilize an onsite sewage disposal system constructed under permit from the Environmental Health Department and subject to the onsite wastewater treatment system regulations that will comply with the standards of San Joaquin County.

d-e) The project proposes to rezone an agricultural parcel to the Warehouse Industrial zone (I-W) in order to develop a truck parking facility. As proposed, the project is not anticipated to generate solid waste in excess of State and local standards and will be able to comply with all regulations related to solid waste.

XX. WILDFIRE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
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?	☐	☐	☒	☐	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐	☐

Impact Discussion:

a-d) The project location is located east of the City of Lodi, CA, at Interstate 5 and State Route 12. It is not identified as a Community at Risk from Wildfire by Cal Fire's "Fire Risk Assessment Program". Communities at Risk from Wildfire are those places within 1.5 miles of areas of High or Very High wildfire threat as determined from CDF-FRAP fuels and hazard data. Therefore, the impact of wildfires on the project are expected to be less than significant.

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

Impact Discussion:

a-c) Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or surrounding area. Mitigation measures have been identified in areas where a potentially significant impact has been identified and these measures, included as conditions of approval, will reduce these impacts to a less than significant level.

ATTACHMENT: SITE PLAN; TRAFFIC IMPACT ANALYSIS

SITE PLAN

Application # PA2200088

Received By _____ On 4-29-2022

THORNTON ROAD
LODI, CALIFORNIA

VICINITY MAP
SCALE: NTS

SITE INFORMATION:

APN:	025-19-031
ZONED:	AGRICULTURAL (AG-40)
FEMA ZONE:	ZONE X
TOTAL AREA	216,237 SQ.FT (4.96 AC)
PAVING:	
HEAVY DUTY CONCRETE	14,400 SQ.FT
HEAVY DUTY ASPHALT	145,685 SQ.FT
TOTAL PAVING	160,085 SQ.FT

PARKING SUMMARY:

PARKING	
13'X53' (5' OVERHANG)	98 TRUCK PARKING
9'X19'	12 STANDARD PARKING
12'X19'	1 VAN ACCESSIBLE PARKING
9'X19'	1 ADA PARKING
TOTAL	110 PARKING STALLS

LEGEND

HEAVY DUTY CONCRETE
7.5" (4,000 PSI) CONCRETE WITH #4 BARS @ 18" O.C. OVER 4" CLASS II AGGREGATE BASE OVER 12" LIME TREATED SUBBASE OVER SUBGRADE COMPACTED TO 95% R.C.

HEAVY DUTY ASPHALT PAVEMENT
4.5" ASPHALT CONCRETE OVER 3.0" CLASS II AGGREGATE BASE OVER 12" LIME TREATED SUBBASE OVER SUBGRADE COMPACTED TO 95% R.C.

PEDESTRIAN CONCRETE
5" (3,500 PSI @28DAYS) CONCRETE WITH #3 18" O.C. OVER 5" CLASS II AGGREGATE BASE COMPACTED TO 95% R.C. OVER 12" SUBGRADE COMPACTED TO 90% R.C.

LANDSCAPE AREA
APPROXIMATELY 46,500 SQ.FT

REPAIR SHOP BUILDING
APPROXIMATELY 4500 SQ.FT

0 20 40 80
SCALE 1"=40'

PROPOSED SHOP WITH
TRUCK TRAILER PARKING

SIEGFRIED
- CIVIL ENGINEERING
- STRUCTURAL ENGINEERING
- SURVEYING
- PLANNING

3428 Brookside Road Stockton, California 95219
209-943-2021 www.siegfriedeng.com Fx: 209-942-0214

gation Measure/Condition	Type of Review		Agency for Monitoring and Reporting Compliance	Action Indicating Compliance or Review	Verification of Compliance or Annual Revie		
	Monitoring	Reporting			By	Date	Remark
Agricultural Mitigation		X	Agricultural Technical Advisory Committee	Execution of Legal Instrument			
pation in the SJMSCP	X		San Joaquin Council of Governments	Certificate of Payment and Signed ITMM			

Memorandum

Date: November 3, 2022

To: Fritz Huber, Vice President, Grupe Huber Company

From: Philip Ault, Director of Noise and Air Quality, FirstCarbon Solutions
Jessica Coria, Senior Air Quality Scientist, FirstCarbon Solutions
Ji Luo, Air Quality Analyst, FirstCarbon Solutions

Subject: Air Quality Analysis for the Proposed Thornton Road Project, City of Lodi, San Joaquin County, California

INTRODUCTION

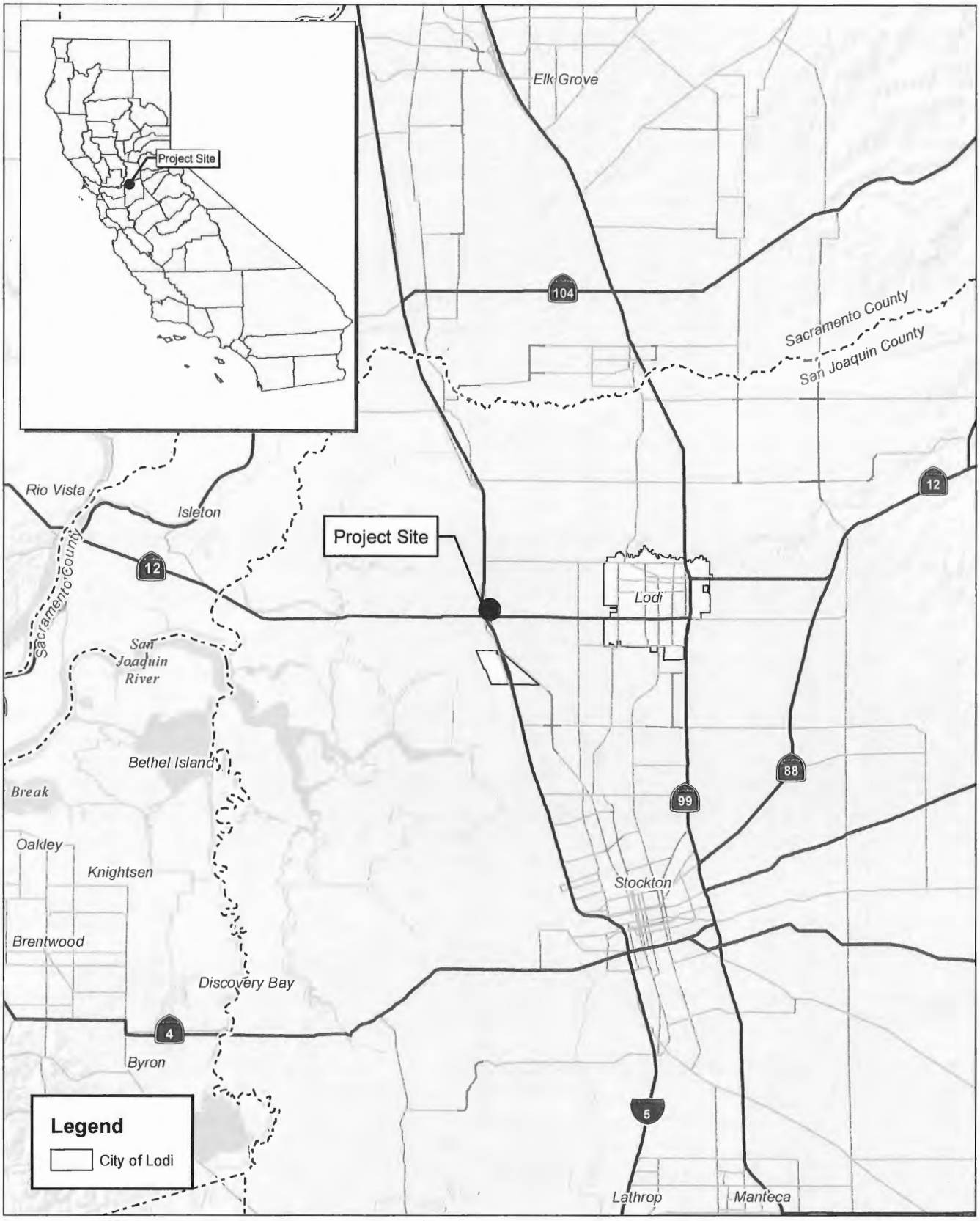
This memorandum analyzes the criteria air pollutant emissions from the construction and operation of the proposed Thornton Road Project (proposed project), located at 15314 North Thornton Road, in the City of Lodi, in San Joaquin Valley County, California. This analysis has been prepared by FirstCarbon Solutions (FCS), on behalf of the Grupe Huber Company (project applicant), in response to a comment letter received from the San Joaquin Valley Air Pollution Control District (Valley Air District) dated June 9, 2022, (Project: Early Consultation PA-2200087 [ZR], PA-2200088 [SA]. District CEQA Reference No: 22220647) and is based on communications with Mr. Harout Sagherian at the Valley Air District.[1]

PROJECT UNDERSTANDING

The project site is located in the northern part of San Joaquin County (Exhibit 1). The 4.96-acre project site (Assessor's Parcel Number [APN] 025-019-031), is located approximately 4.5 miles west of the City of Lodi, and is within the County of San Joaquin 2035 General Plan (General Plan) Planning Area (Exhibit 2). The proposed project consists of the construction and operation of a trailer storage yard with parking spaces available for up to 96 tractor trailers, and a 4,900-square-foot maintenance/repair facility (Exhibit 3). The facility would be used to receive, store, and repair tractor trailers on the property. A second alternative project site design is being considered that would only include the construction of the parking lot and would not include the maintenance/repair facility. As the more emissions-intensive alternative, the proposed project design that includes the maintenance/repair facility is included in this analysis.

It is expected that construction of the proposed project would begin in Spring 2023 and would be completed in under 1 year. The project applicant intends to lease the project site to one single operator that manages a fleet of vehicles and trailers, such as a logistics company or a freight/package delivery company. The proposed project site would be utilized for truck and trailer parking on a short-term basis, with the primary trips to the project site originating from trucks traveling on routes already occurring along Interstate 5 (I-5), which is located approximately 1 mile from the project site.

[1] Email and phone communications between Mr. Sagherian and the project applicant dated September 22, 2022.



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

5 2.5 0 5 Miles

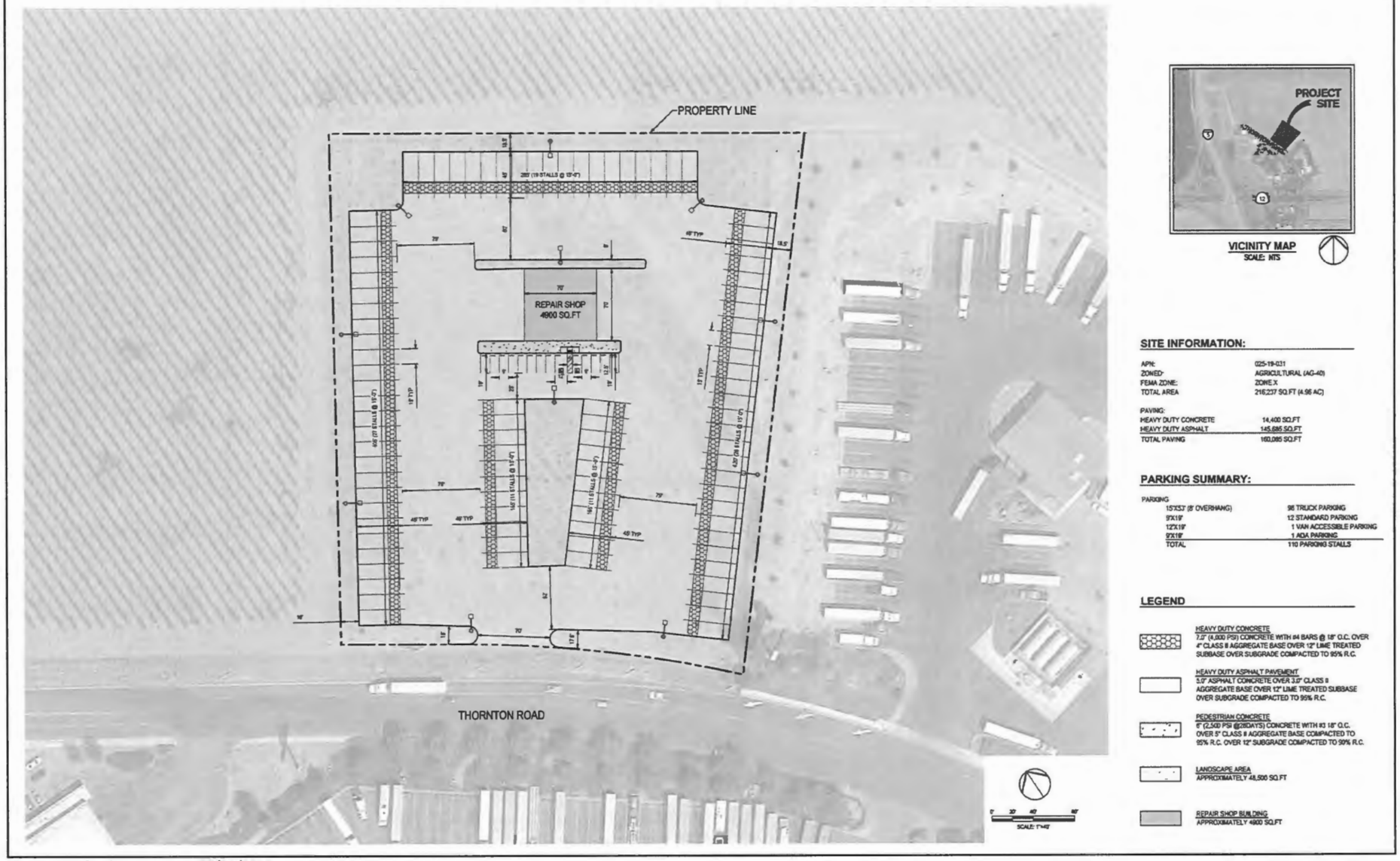
Exhibit 1
Regional Location Map

Source: ESRI Aerial Imagery.

FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map



Source: Seigfried Engineering, 02/01/2021.

FIRSTCARBON SOLUTIONS™

Exhibit 3
Site Plan

APPROACH TO ANALYSIS

Air Quality Regulatory Framework

The proposed project is located within the jurisdiction of the Valley Air District, which regulates air quality in the San Joaquin Valley Air Basin (Air Basin). Within the Air Basin, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter of 2.5 microns and smaller ($PM_{2.5}$) and 10 microns and smaller (PM_{10}), and lead (pb) have been established by both the State of California and the United States Environmental Protection Agency (EPA). The State has also set standards for sulfate concentrations and atmospheric visibility. The Air Basin is classified as a severe nonattainment area for the State Ozone 1-hour, extreme nonattainment for federal Ozone 8-hour, nonattainment for State PM_{10}, and nonattainment for both State and federal $PM_{2.5}$ standards. The Air Basin is designated as being in attainment of the CO, NO_2, SO_2, and pb standards.

Thresholds of Significance

The primary pollutants of concern during project construction and operation are reactive organic gases (ROG), oxides of nitrogen (NO_X), PM_{10}, and $PM_{2.5}$. The Valley Air District's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), adopted in 2015, contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$.[2]

Table 1 shows the thresholds of significance. In developing the thresholds of significance for air pollutants, the Valley Air District considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts on the region's existing air quality conditions.

Table 1: Valley Air District Thresholds of Significance

Pollutant	Construction Emissions (tons/year)	Operational Emissions	
		Permitted Equipment and Activities(tons/year)	Non-permitted Equipment and Activities (tons/year)
Criteria Air Pollutants			
ROG	10	10	10
NO_X	10	10	10
CO	100	100	100
SO_X	27	27	27
PM_{10}	15	15	15

[2] San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March.

Pollutant	Construction Emissions (tons/year)	Operational Emissions	
		Permitted Equipment and Activities(tons/year)	Non-permitted Equipment and Activities (tons/year)
$PM_{2.5}$	15	15	15
Toxic Air Contaminants			
Carcinogens	20 per one million	20 per one million	
Chronic or Acute Hazard Index for Non-Carcinogens	1.0	1.0	

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter 10 microns in diameter
$PM_{2.5}$ = particulate matter 2.5 microns in diameter
ROG = reactive organic gases
SO_X = sulfur oxide
Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. CEQA Air Quality Thresholds of Significance. March.

Model Selection and Guidance

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate the proposed project's operation-related mobile source air pollutant emissions. The CalEEMod model was developed in cooperation with Air Districts throughout the State and is designated as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with construction and operation from a variety of land uses.

The modeling follows Valley Air District guidance where applicable from the GAMAQI. The following criteria air pollutants and precursors are assessed in this analysis:

- Reactive organic gases (ROG)
- Nitrogen oxides (NO_X)
- Carbon monoxide (CO)
- Particulate matter equal to or less than 10 microns in diameter (PM_{10})
- Particulate matter equal to or less than 2.5 microns in diameter ($PM_{2.5}$)

Note that the proposed project would emit ozone precursors ROG and NO_X. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reactions of the ozone precursors.

AIR QUALITY EMISSIONS IMPACT ANALYSIS

This air quality impact is analyzed based on the proposed project's criteria pollutant emissions during construction and operation, and the emissions are compared with Valley Air District thresholds of significance on a project level.

Construction Emissions

During construction, fugitive dust would principally be generated from site grading and other earthmoving activities. The majority of this fugitive dust would remain localized and would be deposited near the project site. Exhaust emissions would also be generated from the operation of the off-road construction equipment and on-road construction vehicles.

Construction Fugitive Dust

Airborne dust is a substantial component of the elevated PM_{10} concentrations in the San Joaquin Valley. Excavation, grading, unvegetated surfaces exposed to wind, material handling, material storage piles, and vehicle travel on paved and unpaved surfaces all can be sources of substantial fugitive dust emissions if not properly managed or maintained. Dust would be generated within the entire project area during project construction. To avoid increased adverse health effects from new construction-related PM_{10} and to address nuisance concerns such as visible clouds of dust and soiling of exposed surfaces, the Valley Air District oversees an extensive set of rules in Regulation VIII. All aspects of the proposed project are expected to comply with the Valley Air District rules. Prohibitions of the Valley Air District state that visible dust emissions must not exceed 20 percent opacity during periods when soil is being disturbed by equipment or by wind at any time.[3] If the appropriate emission control measures listed within Regulation VIII, Fugitive PM_{10} are implemented for a project as recommended by the Valley Air District, then fugitive dust emissions during construction are not considered significant. Fugitive dust control measures shall be implemented during construction activities for the proposed project.

Construction Air Pollutant Emissions: ROG, NO_X, Exhaust PM_{10}, and Exhaust $PM_{2.5}$

As previously discussed, CalEEMod Version 2020.4.0 was used to estimate the proposed project's construction emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the Valley Air District to assess ROG, NO_X, SO_X, CO, exhaust PM_{10}, and exhaust $PM_{2.5}$ construction emissions to determine significance for this criterion.

Construction of the proposed project is expected to begin in March 2023 and to conclude by November 2023. The project applicant indicated that the proposed project construction schedule would be completed between 8-10 months, and this schedule represents an 8-month construction schedule to provide a conservative analysis. This schedule represents a conservative assumption, because if construction moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient

[3] Compliance Assistance Bulletin. April 2007. San Joaquin Valley Air Pollutant Control District (Valley Air District). Website: https://ww2.valleyair.org/media/zdihuwzw/regviiicab.pdf. Accessed on October 21, 2022.

equipment is replaced by newer and cleaner equipment. It is not expected that demolition or soil hauling to balance the site would be part of the proposed project's construction. The preliminary construction schedule is shown in Table 2 below.

Table 2: Preliminary Construction Schedule

Phase	Phase Start Date	Phase End Date	Working Days per Week	Total Number of Working Days
Site Preparation	3/01/2023	3/20/2023	5	14
Grading	3/21/2023	5/15/2023	5	40
Building Construction	7/11/2023	10/9/2023	5	65
Paving	5/16/2023	07/10/2023	5	40
Architectural Coating	10/9/2023	11/01/2023	5	18

The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, and the duration of equipment use. CalEEMod default values for trip lengths and vehicle fleets were used. Annual average construction emissions are compared with the significance thresholds in Table 3.

Table 3: Annual Average Construction Emissions (tons/year)

Phase	ROG	NO_x	CO	SO_x	PM_{10} (Total)	$PM_{2.5}$ (Total)
On-site	0.02	0.19	0.13	<0.01	0.07	0.04
Off-site	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Site Preparation 2023	**0.02**	**0.19**	**0.13**	**0.00**	**0.07**	**0.04**
On-site	0.03	0.36	0.30	<0.01	0.08	0.05
Off-site	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
Grading 2023	**0.04**	**0.36**	**0.30**	**<0.01**	**0.08**	**0.05**
On-site	0.05	0.47	0.53	<0.01	0.02	0.02
Off-site	0.01	0.05	0.11	<0.01	0.04	0.01
Building Construction 2023	**0.06**	**0.52**	**0.64**	**<0.01**	**0.07**	**0.03**
On-site	0.02	0.18	0.24	<0.01	0.01	0.01
Off-site	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
Paving 2023	**0.02**	**0.18**	**0.26**	**<0.01**	**0.01**	**0.01**
On-site	0.07	0.01	0.02	<0.01	<0.01	<0.01
Off-site	<0.01	<0.01	0.01	<0.01	<0.01	<0.01

Phase	ROG	NO_x	CO	SO_x	PM_{10} (Total)	$PM_{2.5}$ (Total)
Architectural Coating 2023	**0.07**	**0.01**	**0.02**	**<0.01**	**<0.01**	**<0.01**
Total 2023	**0.21**	**1.26**	**1.35**	**<0.01**	**0.24**	**0.13**
Significance threshold (tons/year)	10	10	100	27	15	15
Exceed threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_x = nitrogen oxides
PM_{10} = particulate matter 10 microns in diameter
$PM_{2.5}$ = particulate matter 2.5 microns in diameter
ROG = reactive organic gases
SO_x = sulfur oxide
Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. CEQA Air Quality Thresholds of Significance. March.

As indicated in Table 3, the construction emissions from all construction activities are below the recommended thresholds of significance; therefore, the proposed project's construction would have less than significant impact related to emissions of ROG, CO, SO_x, NO_x, PM_{10}, and $PM_{2.5}$.

Operational Emissions

Operational Air Pollutant Emissions: ROG, NO_x, SO_2, CO, PM_{10}, and $PM_{2.5}$

Operational emissions would include area, energy, and mobile sources. Area sources would include emissions from architectural coatings, consumer products, and landscape equipment. Energy sources include emissions from the combustion of natural gas for water and space heating. Mobile sources include exhaust and road dust emissions from the vehicles that would travel to and from the project site. Pollutants of concern include ROG, NO_x, SO_2, CO, PM_{10}, and $PM_{2.5}$.

Project operations were analyzed starting in 2024. While the project applicant expects a maximum of 48 trucks to access the project site daily, in order to provide a conservative analysis, the number of truck trips analyzed to occur during operation of the proposed project was assumed to be 96 trips per day, which is the capacity of the proposed project. The fleet mix for trucking was also conservatively assumed to be exclusively heavy-heavy-duty trucks. There will be an estimated 2 full-time employees at the project site, and so passenger car trips were also included in the operational modeling. Operational emissions of the respective pollutants were calculated using CalEEMod, Version 2020.4.0. For detailed assumptions used to estimate emissions, please see Attachment A.

Table 4 shows the estimated annual emissions from project operations in 2024.

Table 4: 2024 Annual Operational Emissions

Emissions Source	ROG	NO_X	CO	SO_2	PM_{10} (Total)	$PM_{2.5}$ (Total)
	Tons per Year					
Area	0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Energy	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mobile	0.02	0.61	0.31	0.00	0.05	0.02
Total	**0.06**	**0.62**	**0.32**	**<0.01**	**0.05**	**0.02**
Valley Air District Significance Thresholds	10	10	100	27	15	10
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
NO_X = nitrous oxides
SO_2 = sulfur dioxide
CO = carbon monoxide
PM_{10} = particulate matter 10 microns or less in diameter
$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
ROG = reactive organic gases
Source: CalEEMod Output (see Attachment A).

As shown in Table 4, the proposed project would not result in operational air pollutants or precursors emissions that would exceed the Valley Air District thresholds of significance. Therefore, the ongoing, long-term project operations would not have the potential to generate a significant quantity of air pollutants.

Localized Pollutant Analysis

Emissions occurring at or near the project site have the potential to create a localized impact, also referred to as an "air pollutant hotspot." Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard.

The Valley Air District's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after compliance with Rule 9510 and implementation of all enforceable mitigation measures would require preparation of an ambient air quality analysis. The criteria pollutants of concern for localized impact in the Air Basin are PM_{10}, $PM_{2.5}$, nitrogen dioxide (NO_2), and CO. CO violations require heavy traffic volumes and extreme traffic congestion that would not occur at or near the project site; therefore, operational CO emission hotspots are highly unlikely.

An analysis of maximum daily emissions during construction and operation was conducted to determine whether emissions would exceed the 100 pounds per day screening threshold for any pollutant of concern. The results of the analysis are presented in Table 5 and Table 6.

Table 5: Maximum On-site Daily Air Pollutant Emissions During Construction

Source	Maximum Daily Emissions (pounds per day)[1,2]		
	NO_x	PM_{10}	$PM_{2.5}$
Site Preparation 2023	27.52	10.11	5.71
Grading 2023	17.94	3.96	2.25
Building Construction 2023	14.38	0.70	0.66
Paving 2023	8.79	0.44	0.40
Architectural Coating 2023	1.30	0.07	0.07
Maximum Daily Emissions	**27.52**	**10.11**	**5.71**
Screening threshold	100	100	100
Exceed screening threshold?	No	No	No

Notes:
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions. The on-site daily emissions include only on-site emissions for this project.
Source of Thresholds: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impacts.

As illustrated in the table above, localized construction emissions from the proposed project would not exceed the applicable screening thresholds recommended by the Valley Air District. It should be noted that the construction modeling includes compliance with Valley Air District Regulation VIII requirements to reduce fugitive dust emissions from construction.

Operational emissions include emissions generated on-site by area sources such as natural gas combustion and landscape maintenance, and on-site travel from motor vehicles accessing the project site. The daily on-site emissions during project operations are shown below in Table 6.

Table 6: Maximum On-site Daily Air Pollutant Emissions During Operations

Source	Maximum Daily Emissions (lbs per day)					
	ROG	NO_x	CO	SO_x	PM_{10} (Total)	$PM_{2.5}$ (Total)
Area	0.20	<0.01	0.02	<0.01	<0.01	<0.01
Energy	<0.01	0.02	0.02	<0.01	<0.01	<0.01

Source	Maximum Daily Emissions (lbs per day)					
	ROG	NO_x	CO	SO_x	PM_{10} (Total)	$PM_{2.5}$ (Total)
Mobile	0.13	3.49	1.78	0.01	0.30	0.09
Total	**0.34**	**3.51**	**1.82**	**0.01**	**0.30**	**0.10**
Significance threshold	100	100	100	100	100	100
Exceed threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxide
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
Source of Thresholds: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March.

Table 6 shows that the project operation would not exceed any of the localized emission threshold. Additionally, the nearest sensitive receptor is a Recreational Vehicle Park which is 1,600 feet south of the project site. The proposed project is a truck and trailer parking project and would not be a specific land use which may result in significant amounts of on-site sources of toxic air contaminants (TACs) during operation, such as metal smelting or refineries. According to the ARB's Air Quality and Land Use Handbook: A Community Health Perspective,[4] projects should avoid siting new sensitive receptors within 1,000 feet of warehouse type land uses that accommodates more than 100 trucks per day, more than 40 trucks with operating Transport Refrigeration Units (TRUs) per day, or where TRU unit operations exceed 300 hours per week.

While the proposed project would not result in the introduction or siting of new sensitive receptors, the ARB's Air Quality and Land Use Handbook provides these types of warehouse and trucking activities as circumstances that could result in potentially significant health impacts to sensitive receptors within 1,000 feet of these activities. Because of air pollution dispersion, any trucking-related emissions generated from the proposed project site would not be expected to have a localized impact on the nearest sensitive receptors, which are over 1,600 feet (0.3 mile) away from the project site. The proposed project would not include cold storage or TRUs. The proposed project is expected to result in an estimated 48 truck trips daily, and has a maximum truck parking capacity of 96 parking spaces, as described in Attachment A and included in the air quality modeling as a conservative estimate of the maximum number of daily truck trips that would occur at the proposed project site. The daily on-site emissions during project operations with these conservative assumptions are show in Table 6 above, and would not exceed any of the localized emission threshold. As a result, the proposed project would not constitute a land use or activity described in the ARB's Air Quality and Land Use Handbook, which specifies that site-specific air dispersion modeling should be conducted if a site accommodates greater

[4] California Air Resources Board (ARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective.

than 100 trucks daily and is considered to not result in conditions which could result in potentially significant health impacts to nearby sensitive receptors during operation. Other vehicle trips generated by the proposed project would principally consist of passenger vehicles and would not represent a substantial source of TAC emissions. Therefore, the passenger vehicle and trucking activities during project operation are not anticipated to result in a substantial TAC source which may significantly impact nearby sensitive receptors

CONCLUSION

The proposed project construction and operational emissions are well below all applicable Valley Air District thresholds of significance. The proposed project's emissions are further expected to continue to decline in the future as fleets serving the project site comply with new regulations and continue to adopt emerging clean-air technologies. In summary, the proposed project would have less than significant impact related to the regional and localized criteria air pollutants during construction as well as operation.

Should you have any questions about this analysis, please do not hesitate to contact myself at pault@fcs-intl.com, or Jessica Coria, Senior Scientist, at jcoria@fcs-intl.com.

Sincerely,

Philip Ault, Director of Noise and Air Quality
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597

Encl:
Attachment A: Air Quality Analysis Supporting Information

Attachment A:
Air Quality Analysis Supporting Information

Attachment A: Air Quality Analysis Supporting Information

Table of Contents

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Annual

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

Lodi Thornton Rd Truck Stop Project

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.39	Acre	0.39	17,152.00	0
Parking Lot	145.69	1000sqft	3.34	145,685.00	0
City Park	1.11	Acre	1.11	48,500.00	0
Automobile Care Center	4.90	1000sqft	0.11	4,900.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use summary is based on site plan provided by applicant

Construction Phase - Based on project applicant-provided information.

Trips and VMT -

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - The trips are adjusted to have 96 trucks per day as a conservative estimate; passenger vehicle trips are also included to represent the estimated 2 full-time employees at the project site.

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

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix - The fleet mix is adjusted to include HHD only for the trucking trips, as a conservative estimate.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	65.00
tblConstructionPhase	NumDays	8.00	40.00
tblConstructionPhase	NumDays	18.00	40.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	3/25/2024	11/1/2023
tblConstructionPhase	PhaseEndDate	2/2/2024	10/9/2023
tblConstructionPhase	PhaseEndDate	3/17/2023	5/15/2023
tblConstructionPhase	PhaseEndDate	2/28/2024	7/10/2023
tblConstructionPhase	PhaseEndDate	3/7/2023	3/20/2023
tblConstructionPhase	PhaseStartDate	2/29/2024	10/9/2023
tblConstructionPhase	PhaseStartDate	3/18/2023	7/11/2023
tblConstructionPhase	PhaseStartDate	3/8/2023	3/21/2023
tblConstructionPhase	PhaseStartDate	2/3/2024	5/16/2023
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.17	0.00

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

tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.2410e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	3.5220e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	4.7100e-004	0.00
tblFleetMix	SBUS	1.1190e-003	0.00
tblFleetMix	UBUS	3.2500e-004	0.00
tblLandUse	LandUseSquareFeet	16,988.40	17,152.00
tblLandUse	LandUseSquareFeet	145,690.00	145,685.00
tblLandUse	LandUseSquareFeet	48,351.60	48,500.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	23.72	19.60
tblVehicleTrips	SU_TR	11.88	19.60
tblVehicleTrips	WD_TR	23.72	19.60

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2124	1.2638	1.3521	2.7600e-003	0.3345	0.0570	0.3915	0.1541	0.0530	0.2071	0.0000	244.1000	244.1000	0.0538	3.9900e-003	246.6333

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

Maximum	**0.2124**	**1.2638**	**1.3521**	**2.7600e-003**	**0.3345**	**0.0570**	**0.3915**	**0.1541**	**0.0530**	**0.2071**	**0.0000**	**244.1000**	**244.1000**	**0.0538**	**3.9900e-003**	**246.6333**

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					
2023	0.2124	1.2638	1.3521	2.7600e-003	0.1809	0.0570	0.2379	0.0775	0.0530	0.1305	0.0000	244.0997	244.0997	0.0538	3.9900e-003	246.6331
Maximum	**0.2124**	**1.2638**	**1.3521**	**2.7600e-003**	**0.1809**	**0.0570**	**0.2379**	**0.0775**	**0.0530**	**0.1305**	**0.0000**	**244.0997**	**244.0997**	**0.0538**	**3.9900e-003**	**246.6331**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**45.91**	**0.00**	**39.23**	**49.70**	**0.00**	**36.98**	**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)

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

1	3-1-2023	5-31-2023	0.6689	0.6689
2	6-1-2023	8-31-2023	0.4774	0.4774
3	9-1-2023	9-30-2023	0.1925	0.1925
		Highest	0.6689	0.6689

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0371	1.0000e-005	1.4000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7200e-003	2.7200e-003	1.0000e-005	0.0000	2.9000e-003
Energy	4.9000e-004	4.4300e-003	3.7200e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	13.2960	13.2960	1.4600e-003	2.5000e-004	13.4084
Mobile	0.0224	0.6123	0.3133	1.9600e-003	0.0482	3.3400e-003	0.0515	0.0132	3.1900e-003	0.0164	0.0000	188.6605	188.6605	1.6100e-003	0.0296	197.5088
Waste						0.0000	0.0000		0.0000	0.0000	3.8203	0.0000	3.8203	0.2258	0.0000	9.4646
Water						0.0000	0.0000		0.0000	0.0000	0.1463	0.7506	0.8968	0.0151	3.7000e-004	1.3855
Total	**0.0600**	**0.6168**	**0.3184**	**1.9900e-003**	**0.0482**	**3.6800e-003**	**0.0519**	**0.0132**	**3.5300e-003**	**0.0168**	**3.9665**	**202.7098**	**206.6763**	**0.2440**	**0.0302**	**221.7703**

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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0371	1.0000e-005	1.4000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7200e-003	2.7200e-003	1.0000e-005	0.0000	2.9000e-003
Energy	4.9000e-004	4.4300e-003	3.7200e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	13.2960	13.2960	1.4600e-003	2.5000e-004	13.4084
Mobile	0.0224	0.6123	0.3133	1.9600e-003	0.0482	3.3400e-003	0.0515	0.0132	3.1900e-003	0.0164	0.0000	188.6605	188.6605	1.6100e-003	0.0296	197.5088
Waste						0.0000	0.0000		0.0000	0.0000	3.8203	0.0000	3.8203	0.2258	0.0000	9.4646
Water						0.0000	0.0000		0.0000	0.0000	0.1463	0.7506	0.8968	0.0151	3.7000e-004	1.3855
Total	**0.0600**	**0.6168**	**0.3184**	**1.9900e-003**	**0.0482**	**3.6800e-003**	**0.0519**	**0.0132**	**3.5300e-003**	**0.0168**	**3.9665**	**202.7098**	**206.6763**	**0.2440**	**0.0302**	**221.7703**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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 Prep	Site Preparation	3/1/2023	3/20/2023	5	14	
2	Grading	Grading	3/21/2023	5/15/2023	5	40	
3	Building Construction	Building Construction	7/11/2023	10/9/2023	5	65	

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

4	Paving	Paving	5/16/2023	7/10/2023	5	40	
5	Architectural Coating	Architectural Coating	10/9/2023	11/1/2023	5	18	

Acres of Grading (Site Preparation Phase): 21

Acres of Grading (Grading Phase): 40

Acres of Paving: 3.73

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,352; Non-Residential Outdoor: 2,451; Striped Parking Area: 9,770 (Architectural Coating – sqft)

OffRoad Equipment

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

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Prep	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	90.00	35.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Prep - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1376	0.0000	0.1376	0.0707	0.0000	0.0707	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1927	0.1277	2.7000e-004		8.8600e-003	8.8600e-003		8.1500e-003	8.1500e-003	0.0000	23.4155	23.4155	7.5700e-003	0.0000	23.6048
Total	**0.0186**	**0.1927**	**0.1277**	**2.7000e-004**	**0.1376**	**8.8600e-003**	**0.1465**	**0.0707**	**8.1500e-003**	**0.0789**	**0.0000**	**23.4155**	**23.4155**	**7.5700e-003**	**0.0000**	**23.6048**

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

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	4.8000e-004	3.4000e-004	4.0900e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2297	1.2297	3.0000e-005	3.0000e-005	1.2397
Total	**4.8000e-004**	**3.4000e-004**	**4.0900e-003**	**1.0000e-005**	**1.5600e-003**	**1.0000e-005**	**1.5700e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2297**	**1.2297**	**3.0000e-005**	**3.0000e-005**	**1.2397**

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					0.0619	0.0000	0.0619	0.0318	0.0000	0.0318	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1927	0.1277	2.7000e-004		8.8600e-003	8.8600e-003		8.1500e-003	8.1500e-003	0.0000	23.4155	23.4155	7.5700e-003	0.0000	23.6048
Total	**0.0186**	**0.1927**	**0.1277**	**2.7000e-004**	**0.0619**	**8.8600e-003**	**0.0708**	**0.0318**	**8.1500e-003**	**0.0400**	**0.0000**	**23.4155**	**23.4155**	**7.5700e-003**	**0.0000**	**23.6048**

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

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	4.8000e-004	3.4000e-004	4.0900e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2297	1.2297	3.0000e-005	3.0000e-005	1.2397
Total	**4.8000e-004**	**3.4000e-004**	**4.0900e-003**	**1.0000e-005**	**1.5600e-003**	**1.0000e-005**	**1.5700e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2297**	**1.2297**	**3.0000e-005**	**3.0000e-005**	**1.2397**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1417	0.0000	0.1417	0.0685	0.0000	0.0685	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0342	0.3587	0.2950	5.9000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	52.1212	52.1212	0.0169	0.0000	52.5427
Total	**0.0342**	**0.3587**	**0.2950**	**5.9000e-004**	**0.1417**	**0.0155**	**0.1572**	**0.0685**	**0.0143**	**0.0828**	**0.0000**	**52.1212**	**52.1212**	**0.0169**	**0.0000**	**52.5427**

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	8.1000e-004	9.7300e-003	3.0000e-005	3.7200e-003	2.0000e-005	3.7300e-003	9.9000e-004	2.0000e-005	1.0000e-003	0.0000	2.9279	2.9279	7.0000e-005	7.0000e-005	2.9517
Total	**1.1400e-003**	**8.1000e-004**	**9.7300e-003**	**3.0000e-005**	**3.7200e-003**	**2.0000e-005**	**3.7300e-003**	**9.9000e-004**	**2.0000e-005**	**1.0000e-003**	**0.0000**	**2.9279**	**2.9279**	**7.0000e-005**	**7.0000e-005**	**2.9517**

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					0.0637	0.0000	0.0637	0.0308	0.0000	0.0308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0342	0.3587	0.2950	5.9000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	52.1212	52.1212	0.0169	0.0000	52.5426
Total	**0.0342**	**0.3587**	**0.2950**	**5.9000e-004**	**0.0637**	**0.0155**	**0.0792**	**0.0308**	**0.0143**	**0.0451**	**0.0000**	**52.1212**	**52.1212**	**0.0169**	**0.0000**	**52.5426**

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	8.1000e-004	9.7300e-003	3.0000e-005	3.7200e-003	2.0000e-005	3.7300e-003	9.9000e-004	2.0000e-005	1.0000e-003	0.0000	2.9279	2.9279	7.0000e-005	7.0000e-005	2.9517
Total	**1.1400e-003**	**8.1000e-004**	**9.7300e-003**	**3.0000e-005**	**3.7200e-003**	**2.0000e-005**	**3.7300e-003**	**9.9000e-004**	**2.0000e-005**	**1.0000e-003**	**0.0000**	**2.9279**	**2.9279**	**7.0000e-005**	**7.0000e-005**	**2.9517**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0511	0.4675	0.5279	8.8000e-004		0.0227	0.0227		0.0214	0.0214	0.0000	75.3365	75.3365	0.0179	0.0000	75.7846
Total	**0.0511**	**0.4675**	**0.5279**	**8.8000e-004**		**0.0227**	**0.0227**		**0.0214**	**0.0214**	**0.0000**	**75.3365**	**75.3365**	**0.0179**	**0.0000**	**75.7846**

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

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	1.1500e-003	0.0468	0.0144	2.1000e-004	6.8000e-003	2.9000e-004	7.0900e-003	1.9700e-003	2.8000e-004	2.2400e-003	0.0000	19.9821	19.9821	1.0000e-004	3.0200e-003	20.8852
Worker	0.0111	7.8800e-003	0.0949	3.1000e-004	0.0362	1.7000e-004	0.0364	9.6300e-003	1.6000e-004	9.7900e-003	0.0000	28.5470	28.5470	6.6000e-004	7.2000e-004	28.7792
Total	**0.0122**	**0.0547**	**0.1093**	**5.2000e-004**	**0.0430**	**4.6000e-004**	**0.0435**	**0.0116**	**4.4000e-004**	**0.0120**	**0.0000**	**48.5291**	**48.5291**	**7.6000e-004**	**3.7400e-003**	**49.6644**

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	0.0511	0.4675	0.5279	8.8000e-004		0.0227	0.0227		0.0214	0.0214	0.0000	75.3365	75.3365	0.0179	0.0000	75.7845
Total	**0.0511**	**0.4675**	**0.5279**	**8.8000e-004**		**0.0227**	**0.0227**		**0.0214**	**0.0214**	**0.0000**	**75.3365**	**75.3365**	**0.0179**	**0.0000**	**75.7845**

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

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	1.1500e-003	0.0468	0.0144	2.1000e-004	6.8000e-003	2.9000e-004	7.0900e-003	1.9700e-003	2.8000e-004	2.2400e-003	0.0000	19.9821	19.9821	1.0000e-004	3.0200e-003	20.8852
Worker	0.0111	7.8800e-003	0.0949	3.1000e-004	0.0362	1.7000e-004	0.0364	9.6300e-003	1.6000e-004	9.7900e-003	0.0000	28.5470	28.5470	6.6000e-004	7.2000e-004	28.7792
Total	**0.0122**	**0.0547**	**0.1093**	**5.2000e-004**	**0.0430**	**4.6000e-004**	**0.0435**	**0.0116**	**4.4000e-004**	**0.0120**	**0.0000**	**48.5291**	**48.5291**	**7.6000e-004**	**3.7400e-003**	**49.6644**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0184	0.1758	0.2438	3.8000e-004		8.7100e-003	8.7100e-003		8.0500e-003	8.0500e-003	0.0000	32.7572	32.7572	0.0103	0.0000	33.0145
Paving	4.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1758**	**0.2438**	**3.8000e-004**		**8.7100e-003**	**8.7100e-003**		**8.0500e-003**	**8.0500e-003**	**0.0000**	**32.7572**	**32.7572**	**0.0103**	**0.0000**	**33.0145**

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	1.0800e-003	0.0130	4.0000e-005	4.9500e-003	2.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.9039	3.9039	9.0000e-005	1.0000e-004	3.9356
Total	**1.5200e-003**	**1.0800e-003**	**0.0130**	**4.0000e-005**	**4.9500e-003**	**2.0000e-005**	**4.9800e-003**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**0.0000**	**3.9039**	**3.9039**	**9.0000e-005**	**1.0000e-004**	**3.9356**

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	0.0184	0.1758	0.2438	3.8000e-004		8.7100e-003	8.7100e-003		8.0500e-003	8.0500e-003	0.0000	32.7571	32.7571	0.0103	0.0000	33.0145
Paving	4.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1758**	**0.2438**	**3.8000e-004**		**8.7100e-003**	**8.7100e-003**		**8.0500e-003**	**8.0500e-003**	**0.0000**	**32.7571**	**32.7571**	**0.0103**	**0.0000**	**33.0145**

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	1.0800e-003	0.0130	4.0000e-005	4.9500e-003	2.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.9039	3.9039	9.0000e-005	1.0000e-004	3.9356
Total	**1.5200e-003**	**1.0800e-003**	**0.0130**	**4.0000e-005**	**4.9500e-003**	**2.0000e-005**	**4.9800e-003**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**0.0000**	**3.9039**	**3.9039**	**9.0000e-005**	**1.0000e-004**	**3.9356**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7200e-003	0.0117	0.0163	3.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	2.2979	2.2979	1.4000e-004	0.0000	2.3014
Total	**0.0698**	**0.0117**	**0.0163**	**3.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.4000e-004**	**0.0000**	**2.3014**

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Annual

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	4.4000e-004	5.2500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5811	1.5811	4.0000e-005	4.0000e-005	1.5939
Total	**6.1000e-004**	**4.4000e-004**	**5.2500e-003**	**2.0000e-005**	**2.0100e-003**	**1.0000e-005**	**2.0200e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.5811**	**1.5811**	**4.0000e-005**	**4.0000e-005**	**1.5939**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7200e-003	0.0117	0.0163	3.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	2.2979	2.2979	1.4000e-004	0.0000	2.3014
Total	**0.0698**	**0.0117**	**0.0163**	**3.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.4000e-004**	**0.0000**	**2.3014**

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	4.4000e-004	5.2500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5811	1.5811	4.0000e-005	4.0000e-005	1.5939
Total	**6.1000e-004**	**4.4000e-004**	**5.2500e-003**	**2.0000e-005**	**2.0100e-003**	**1.0000e-005**	**2.0200e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.5811**	**1.5811**	**4.0000e-005**	**4.0000e-005**	**1.5939**

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	0.0224	0.6123	0.3133	1.9600e-003	0.0482	3.3400e-003	0.0515	0.0132	3.1900e-003	0.0164	0.0000	188.6605	188.6605	1.6100e-003	0.0296	197.5088
Unmitigated	0.0224	0.6123	0.3133	1.9600e-003	0.0482	3.3400e-003	0.0515	0.0132	3.1900e-003	0.0164	0.0000	188.6605	188.6605	1.6100e-003	0.0296	197.5088

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	96.04	96.04	96.04	110,386	110,386
City Park	0.87	2.18	2.43	3,148	3,148
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	96.91	98.22	98.47	113,535	113,535

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
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix Attachment A

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522
Other Non-Asphalt Surfaces	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522
Parking Lot	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522

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	8.4716	8.4716	1.3700e-003	1.7000e-004	8.5554
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	8.4716	8.4716	1.3700e-003	1.7000e-004	8.5554
NaturalGas Mitigated	4.9000e-004	4.4300e-003	3.7200e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8244	4.8244	9.0000e-005	9.0000e-005	4.8530
NaturalGas Unmitigated	4.9000e-004	4.4300e-003	3.7200e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8244	4.8244	9.0000e-005	9.0000e-005	4.8530

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					
Automobile Care Center	90405	4.9000e-004	4.4300e-003	3.7200e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8244	4.8244	9.0000e-005	9.0000e-005	4.8530
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.9000e-004**	**4.4300e-003**	**3.7200e-003**	**3.0000e-005**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**	**0.0000**	**4.8244**	**4.8244**	**9.0000e-005**	**9.0000e-005**	**4.8530**

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

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					
Automobile Care Center	90405	4.9000e-004	4.4300e-003	3.7200e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8244	4.8244	9.0000e-005	9.0000e-005	4.8530
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.9000e-004**	**4.4300e-003**	**3.7200e-003**	**3.0000e-005**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**	**0.0000**	**4.8244**	**4.8244**	**9.0000e-005**	**9.0000e-005**	**4.8530**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
Automobile Care Center	40572		3.7539	6.1000e-004	7.0000e-005	3.7910
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	50989.8		4.7178	7.6000e-004	9.0000e-005	4.7644
Total			**8.4716**	**1.3700e-003**	**1.6000e-004**	**8.5554**

Mitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
Automobile Care Center	40572		3.7539	6.1000e-004	7.0000e-005	3.7910
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	50989.8		4.7178	7.6000e-004	9.0000e-005	4.7644
Total			**8.4716**	**1.3700e-003**	**1.6000e-004**	**8.5554**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	0.0371	1.0000e-005	1.4000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7200e-003	2.7200e-003	1.0000e-005	0.0000	2.9000e-003

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

Unmitigated	0.0371	1.0000e-005	1.4000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7200e-003	2.7200e-003	1.0000e-005	0.0000	2.9000e-003

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	6.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0301					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7200e-003	2.7200e-003	1.0000e-005	0.0000	2.9000e-003
Total	**0.0371**	**1.0000e-005**	**1.4000e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7200e-003**	**2.7200e-003**	**1.0000e-005**	**0.0000**	**2.9000e-003**

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

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	6.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0301					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7200e-003	2.7200e-003	1.0000e-005	0.0000	2.9000e-003
Total	**0.0371**	**1.0000e-005**	**1.4000e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7200e-003**	**2.7200e-003**	**1.0000e-005**	**0.0000**	**2.9000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		0.8968	0.0151	3.7000e-004	1.3855
Unmitigated		0.8968	0.0151	3.7000e-004	1.3855

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
Automobile Care Center	0.460997 / 0.282547		0.4686	0.0151	3.6000e-004	0.9530
City Park	0 / 1.32254		0.4283	7.0000e-005	1.0000e-005	0.4325
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			**0.8968**	**0.0151**	**3.7000e-004**	**1.3855**

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

Mitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
Automobile Care Center	0.460997 / 0.282547		0.4686	0.0151	3.6000e-004	0.9530
City Park	0 / 1.32254		0.4283	7.0000e-005	1.0000e-005	0.4325
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			**0.8968**	**0.0151**	**3.7000e-004**	**1.3855**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated		3.8203	0.2258	0.0000	9.4646

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

Unmitigated		3.8203	0.2258	0.0000	9.4646

8.2 Waste by Land Use

Unmitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
Automobile Care Center	18.72		3.8000	0.2246	0.0000	9.4143
City Park	0.1		0.0203	1.2000e-003	0.0000	0.0503
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Total			**3.8203**	**0.2258**	**0.0000**	**9.4646**

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

Mitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
Automobile Care Center	18.72		3.8000	0.2246	0.0000	9.4143
City Park	0.1		0.0203	1.2000e-003	0.0000	0.0503
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Total			**3.8203**	**0.2258**	**0.0000**	**9.4646**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

Equipment Type	Number

11.0 Vegetation

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

Lodi Thornton Rd Truck Stop Project

San Joaquin County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.39	Acre	0.39	17,152.00	0
Parking Lot	145.69	1000sqft	3.34	145,685.00	0
City Park	1.11	Acre	1.11	48,500.00	0
Automobile Care Center	4.90	1000sqft	0.11	4,900.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use summary is based on site plan provided by applicant

Construction Phase - Based on project applicant-provided information.

Trips and VMT -

Demolition

Grading -

Architectural Coating -

Vehicle Trips - The trips are adjusted to have 96 trucks per day as a conservative estimate; passenger vehicle trips are also included to represent the estimated 2 full-time employees at the project site.

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Summer

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

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix - The fleet mix is adjusted to include HHD only for the trucking trips, as an conservative estimate.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	65.00
tblConstructionPhase	NumDays	8.00	40.00
tblConstructionPhase	NumDays	18.00	40.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	3/25/2024	11/1/2023
tblConstructionPhase	PhaseEndDate	2/2/2024	10/9/2023
tblConstructionPhase	PhaseEndDate	3/17/2023	5/15/2023
tblConstructionPhase	PhaseEndDate	2/28/2024	7/10/2023
tblConstructionPhase	PhaseEndDate	3/7/2023	3/20/2023
tblConstructionPhase	PhaseStartDate	2/29/2024	10/9/2023
tblConstructionPhase	PhaseStartDate	3/18/2023	7/11/2023
tblConstructionPhase	PhaseStartDate	3/8/2023	3/21/2023
tblConstructionPhase	PhaseStartDate	2/3/2024	5/16/2023
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.17	0.00

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

tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.2410e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	3.5220e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	4.7100e-004	0.00
tblFleetMix	SBUS	1.1190e-003	0.00
tblFleetMix	UBUS	3.2500e-004	0.00
tblLandUse	LandUseSquareFeet	16,988.40	17,152.00
tblLandUse	LandUseSquareFeet	145,690.00	145,685.00
tblLandUse	LandUseSquareFeet	48,351.60	48,500.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	23.72	19.60
tblVehicleTrips	SU_TR	11.88	19.60
tblVehicleTrips	WD_TR	23.72	19.60

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.8075	27.5682	22.5106	0.0486	19.8869	1.2671	21.1540	10.1634	1.1657	11.3291	0.0000	4,768.6215	4,768.6215	1.1969	0.1300	4,823.7178

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

Maximum	**9.8075**	**27.5682**	**22.5106**	**0.0486**	**19.8869**	**1.2671**	**21.1540**	**10.1634**	**1.1657**	**11.3291**	**0.0000**	**4,768.6215**	**4,768.6215**	**1.1969**	**0.1300**	**4,823.7178**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.8075	27.5682	22.5106	0.0486	9.0756	1.2671	10.3426	4.6071	1.1657	5.7728	0.0000	4,768.6215	4,768.6215	1.1969	0.1300	4,823.7178
Maximum	**9.8075**	**27.5682**	**22.5106**	**0.0486**	**9.0756**	**1.2671**	**10.3426**	**4.6071**	**1.1657**	**5.7728**	**0.0000**	**4,768.6215**	**4,768.6215**	**1.1969**	**0.1300**	**4,823.7178**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.36**	**0.00**	**51.11**	**54.67**	**0.00**	**49.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Energy	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
Mobile	0.1331	3.2373	1.7300	0.0108	0.2779	0.0184	0.2963	0.0761	0.0176	0.0936		1,147.6189	1,147.6189	0.0104	0.1790	1,201.2290
Total	**0.3395**	**3.2617**	**1.7659**	**0.0110**	**0.2779**	**0.0203**	**0.2982**	**0.0761**	**0.0195**	**0.0956**		**1,176.7916**	**1,176.7916**	**0.0110**	**0.1796**	**1,230.5770**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Energy	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
Mobile	0.1331	3.2373	1.7300	0.0108	0.2779	0.0184	0.2963	0.0761	0.0176	0.0936		1,147.6189	1,147.6189	0.0104	0.1790	1,201.2290
Total	**0.3395**	**3.2617**	**1.7659**	**0.0110**	**0.2779**	**0.0203**	**0.2982**	**0.0761**	**0.0195**	**0.0956**		**1,176.7916**	**1,176.7916**	**0.0110**	**0.1796**	**1,230.5770**

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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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 Prep	Site Preparation	3/1/2023	3/20/2023	5	14	
2	Grading	Grading	3/21/2023	5/15/2023	5	40	
3	Building Construction	Building Construction	7/11/2023	10/9/2023	5	65	
4	Paving	Paving	5/16/2023	7/10/2023	5	40	
5	Architectural Coating	Architectural Coating	10/9/2023	11/1/2023	5	18	

Acres of Grading (Site Preparation Phase): 21

Acres of Grading (Grading Phase): 40

Acres of Paving: 3.73

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,352; Non-Residential Outdoor: 2,451; Striped Parking Area: 9,770 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Prep	Rubber Tired Dozers	3	8.00	247	0.40
Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Prep	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	90.00	35.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Prep - 2023

Unmitigated Construction On-Site

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Summer

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	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0744	0.0440	0.6698	2.0400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		209.1363	209.1363	4.3900e-003	4.6000e-003	210.6176
Total	**0.0744**	**0.0440**	**0.6698**	**2.0400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**209.1363**	**209.1363**	**4.3900e-003**	**4.6000e-003**	**210.6176**

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Summer

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.8457**	**1.2660**	**10.1117**	**4.5461**	**1.1647**	**5.7108**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0744	0.0440	0.6698	2.0400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		209.1363	209.1363	4.3900e-003	4.6000e-003	210.6176
Total	**0.0744**	**0.0440**	**0.6698**	**2.0400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**209.1363**	**209.1363**	**4.3900e-003**	**4.6000e-003**	**210.6176**

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

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0620	0.0367	0.5582	1.7000e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		174.2803	174.2803	3.6600e-003	3.8400e-003	175.5147
Total	**0.0620**	**0.0367**	**0.5582**	**1.7000e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**174.2803**	**174.2803**	**3.6600e-003**	**3.8400e-003**	**175.5147**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**3.1872**	**0.7749**	**3.9621**	**1.5411**	**0.7129**	**2.2541**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0620	0.0367	0.5582	1.7000e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		174.2803	174.2803	3.6600e-003	3.8400e-003	175.5147
Total	**0.0620**	**0.0367**	**0.5582**	**1.7000e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**174.2803**	**174.2803**	**3.6600e-003**	**3.8400e-003**	**175.5147**

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

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0367	1.3802	0.4368	6.4000e-003	0.2145	8.9600e-003	0.2235	0.0618	8.5700e-003	0.0704		677.1456	677.1456	3.4800e-003	0.1024	707.7369
Worker	0.3719	0.2200	3.3490	0.0102	1.1496	5.2800e-003	1.1549	0.3049	4.8600e-003	0.3097		1,045.6816	1,045.6816	0.0220	0.0230	1,053.0882
Total	**0.4086**	**1.6003**	**3.7857**	**0.0166**	**1.3641**	**0.0142**	**1.3784**	**0.3666**	**0.0134**	**0.3801**		**1,722.8272**	**1,722.8272**	**0.0255**	**0.1254**	**1,760.8251**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0367	1.3802	0.4368	6.4000e-003	0.2145	8.9600e-003	0.2235	0.0618	8.5700e-003	0.0704		677.1456	677.1456	3.4800e-003	0.1024	707.7369
Worker	0.3719	0.2200	3.3490	0.0102	1.1496	5.2800e-003	1.1549	0.3049	4.8600e-003	0.3097		1,045.6816	1,045.6816	0.0220	0.0230	1,053.0882
Total	**0.4086**	**1.6003**	**3.7857**	**0.0166**	**1.3641**	**0.0142**	**1.3784**	**0.3666**	**0.0134**	**0.3801**		**1,722.8272**	**1,722.8272**	**0.0255**	**0.1254**	**1,760.8251**

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

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1369**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**		**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0827	0.0489	0.7442	2.2700e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688		232.3737	232.3737	4.8800e-003	5.1100e-003	234.0196
Total	**0.0827**	**0.0489**	**0.7442**	**2.2700e-003**	**0.2555**	**1.1700e-003**	**0.2566**	**0.0678**	**1.0800e-003**	**0.0688**		**232.3737**	**232.3737**	**4.8800e-003**	**5.1100e-003**	**234.0196**

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Summer

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1369**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**	**0.0000**	**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0827	0.0489	0.7442	2.2700e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688		232.3737	232.3737	4.8800e-003	5.1100e-003	234.0196
Total	**0.0827**	**0.0489**	**0.7442**	**2.2700e-003**	**0.2555**	**1.1700e-003**	**0.2566**	**0.0678**	**1.0800e-003**	**0.0688**		**232.3737**	**232.3737**	**4.8800e-003**	**5.1100e-003**	**234.0196**

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

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.5601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**7.7517**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0744	0.0440	0.6698	2.0400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		209.1363	209.1363	4.3900e-003	4.6000e-003	210.6176
Total	**0.0744**	**0.0440**	**0.6698**	**2.0400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**209.1363**	**209.1363**	**4.3900e-003**	**4.6000e-003**	**210.6176**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.5601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**7.7517**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0744	0.0440	0.6698	2.0400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		209.1363	209.1363	4.3900e-003	4.6000e-003	210.6176
Total	**0.0744**	**0.0440**	**0.6698**	**2.0400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**209.1363**	**209.1363**	**4.3900e-003**	**4.6000e-003**	**210.6176**

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	lb/day										lb/day					
Mitigated	0.1331	3.2373	1.7300	0.0108	0.2779	0.0184	0.2963	0.0761	0.0176	0.0936		1,147.6189	1,147.6189	0.0104	0.1790	1,201.2290
Unmitigated	0.1331	3.2373	1.7300	0.0108	0.2779	0.0184	0.2963	0.0761	0.0176	0.0936		1,147.6189	1,147.6189	0.0104	0.1790	1,201.2290

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	96.04	96.04	96.04	110,386	110,386
City Park	0.87	2.18	2.43	3,148	3,148
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	96.91	98.22	98.47	113,535	113,535

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
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28

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

City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522
Other Non-Asphalt Surfaces	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522
Parking Lot	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
NaturalGas Unmitigated	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	247.685	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0243**	**0.0204**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**		**29.1394**	**29.1394**	**5.6000e-004**	**5.3000e-004**	**29.3126**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0.247685	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0243**	**0.0204**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**		**29.1394**	**29.1394**	**5.6000e-004**	**5.3000e-004**	**29.3126**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355

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

Unmitigated	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0373					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4300e-003	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Total	**0.2038**	**1.4000e-004**	**0.0155**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0333**	**0.0333**	**9.0000e-005**		**0.0355**

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

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0373					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4300e-003	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Total	**0.2038**	**1.4000e-004**	**0.0155**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0333**	**0.0333**	**9.0000e-005**		**0.0355**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Winter

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

Lodi Thornton Rd Truck Stop Project

San Joaquin County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.39	Acre	0.39	17,152.00	0
Parking Lot	145.69	1000sqft	3.34	145,685.00	0
City Park	1.11	Acre	1.11	48,500.00	0
Automobile Care Center	4.90	1000sqft	0.11	4,900.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use summary is based on site plan provided by applicant

Construction Phase - Based on project applicant-provided information.

Trips and VMT -

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - The trips are adjusted to have 96 trucks per day as a conservative estimate; passenger vehicle trips are also included to represent the estimated 2 full-time employees at the project site.

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Winter

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

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix - The fleet mix is adjusted to include HHD only for the trucking trips, as a conservative estimate.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	65.00
tblConstructionPhase	NumDays	8.00	40.00
tblConstructionPhase	NumDays	18.00	40.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	3/25/2024	11/1/2023
tblConstructionPhase	PhaseEndDate	2/2/2024	10/9/2023
tblConstructionPhase	PhaseEndDate	3/17/2023	5/15/2023
tblConstructionPhase	PhaseEndDate	2/28/2024	7/10/2023
tblConstructionPhase	PhaseEndDate	3/7/2023	3/20/2023
tblConstructionPhase	PhaseStartDate	2/29/2024	10/9/2023
tblConstructionPhase	PhaseStartDate	3/18/2023	7/11/2023
tblConstructionPhase	PhaseStartDate	3/8/2023	3/21/2023
tblConstructionPhase	PhaseStartDate	2/3/2024	5/16/2023
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.17	0.00

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

tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.2410e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	3.5220e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	4.7100e-004	0.00
tblFleetMix	SBUS	1.1190e-003	0.00
tblFleetMix	UBUS	3.2500e-004	0.00
tblLandUse	LandUseSquareFeet	16,988.40	17,152.00
tblLandUse	LandUseSquareFeet	145,690.00	145,685.00
tblLandUse	LandUseSquareFeet	48,351.60	48,500.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	23.72	19.60
tblVehicleTrips	SU_TR	11.88	19.60
tblVehicleTrips	WD_TR	23.72	19.60

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.7994	27.5775	21.9726	0.0474	19.8869	1.2671	21.1540	10.1634	1.1657	11.3291	0.0000	4,648.0425	4,648.0425	1.1973	0.1340	4,704.3989

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

Maximum	**9.7994**	**27.5775**	**21.9726**	**0.0474**	**19.8869**	**1.2671**	**21.1540**	**10.1634**	**1.1657**	**11.3291**	**0.0000**	**4,648.0425**	**4,648.0425**	**1.1973**	**0.1340**	**4,704.3989**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.7994	27.5775	21.9726	0.0474	9.0756	1.2671	10.3426	4.6071	1.1657	5.7728	0.0000	4,648.0425	4,648.0425	1.1973	0.1340	4,704.3989
Maximum	**9.7994**	**27.5775**	**21.9726**	**0.0474**	**9.0756**	**1.2671**	**10.3426**	**4.6071**	**1.1657**	**5.7728**	**0.0000**	**4,648.0425**	**4,648.0425**	**1.1973**	**0.1340**	**4,704.3989**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.36**	**0.00**	**51.11**	**54.67**	**0.00**	**49.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Energy	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
Mobile	0.1171	3.4851	1.7801	0.0109	0.2779	0.0185	0.2964	0.0761	0.0177	0.0938		1,154.1075	1,154.1075	9.7600e-003	0.1803	1,208.0671
Total	**0.3236**	**3.5095**	**1.8160**	**0.0110**	**0.2779**	**0.0204**	**0.2983**	**0.0761**	**0.0196**	**0.0957**		**1,183.2802**	**1,183.2802**	**0.0104**	**0.1808**	**1,237.4151**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Energy	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
Mobile	0.1171	3.4851	1.7801	0.0109	0.2779	0.0185	0.2964	0.0761	0.0177	0.0938		1,154.1075	1,154.1075	9.7600e-003	0.1803	1,208.0671
Total	**0.3236**	**3.5095**	**1.8160**	**0.0110**	**0.2779**	**0.0204**	**0.2983**	**0.0761**	**0.0196**	**0.0957**		**1,183.2802**	**1,183.2802**	**0.0104**	**0.1808**	**1,237.4151**

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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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 Prep	Site Preparation	3/1/2023	3/20/2023	5	14	
2	Grading	Grading	3/21/2023	5/15/2023	5	40	
3	Building Construction	Building Construction	7/11/2023	10/9/2023	5	65	
4	Paving	Paving	5/16/2023	7/10/2023	5	40	
5	Architectural Coating	Architectural Coating	10/9/2023	11/1/2023	5	18	

Acres of Grading (Site Preparation Phase): 21

Acres of Grading (Grading Phase): 40

Acres of Paving: 3.73

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,352; Non-Residential Outdoor: 2,451; Striped Parking Area: 9,770 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Prep	Rubber Tired Dozers	3	8.00	247	0.40
Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Prep	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	90.00	35.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Prep - 2023

Unmitigated Construction On-Site

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	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0734	0.0533	0.5776	1.8400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		188.8041	188.8041	4.7400e-003	5.2300e-003	190.4812
Total	**0.0734**	**0.0533**	**0.5776**	**1.8400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**188.8041**	**188.8041**	**4.7400e-003**	**5.2300e-003**	**190.4812**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.8457**	**1.2660**	**10.1117**	**4.5461**	**1.1647**	**5.7108**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0734	0.0533	0.5776	1.8400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		188.8041	188.8041	4.7400e-003	5.2300e-003	190.4812
Total	**0.0734**	**0.0533**	**0.5776**	**1.8400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**188.8041**	**188.8041**	**4.7400e-003**	**5.2300e-003**	**190.4812**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0612	0.0444	0.4813	1.5400e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		157.3367	157.3367	3.9500e-003	4.3600e-003	158.7343
Total	**0.0612**	**0.0444**	**0.4813**	**1.5400e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**157.3367**	**157.3367**	**3.9500e-003**	**4.3600e-003**	**158.7343**

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Winter

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**3.1872**	**0.7749**	**3.9621**	**1.5411**	**0.7129**	**2.2541**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0612	0.0444	0.4813	1.5400e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		157.3367	157.3367	3.9500e-003	4.3600e-003	158.7343
Total	**0.0612**	**0.0444**	**0.4813**	**1.5400e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**157.3367**	**157.3367**	**3.9500e-003**	**4.3600e-003**	**158.7343**

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

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0344	1.4757	0.4522	6.4100e-003	0.2145	8.9900e-003	0.2235	0.0618	8.6000e-003	0.0704		678.5601	678.5601	3.3700e-003	0.1027	709.2370
Worker	0.3670	0.2665	2.8878	9.2200e-003	1.1496	5.2800e-003	1.1549	0.3049	4.8600e-003	0.3097		944.0204	944.0204	0.0237	0.0262	952.4057
Total	**0.4015**	**1.7422**	**3.3400**	**0.0156**	**1.3641**	**0.0143**	**1.3784**	**0.3666**	**0.0135**	**0.3801**		**1,622.5805**	**1,622.5805**	**0.0271**	**0.1288**	**1,661.6427**

Lodi Thornton Rd Truck Stop Project - San Joaquin County, Winter

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0344	1.4757	0.4522	6.4100e-003	0.2145	8.9900e-003	0.2235	0.0618	8.6000e-003	0.0704		678.5601	678.5601	3.3700e-003	0.1027	709.2370
Worker	0.3670	0.2665	2.8878	9.2200e-003	1.1496	5.2800e-003	1.1549	0.3049	4.8600e-003	0.3097		944.0204	944.0204	0.0237	0.0262	952.4057
Total	**0.4015**	**1.7422**	**3.3400**	**0.0156**	**1.3641**	**0.0143**	**1.3784**	**0.3666**	**0.0135**	**0.3801**		**1,622.5805**	**1,622.5805**	**0.0271**	**0.1288**	**1,661.6427**

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

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1369**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**		**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0816	0.0592	0.6417	2.0500e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688		209.7823	209.7823	5.2600e-003	5.8100e-003	211.6457
Total	**0.0816**	**0.0592**	**0.6417**	**2.0500e-003**	**0.2555**	**1.1700e-003**	**0.2566**	**0.0678**	**1.0800e-003**	**0.0688**		**209.7823**	**209.7823**	**5.2600e-003**	**5.8100e-003**	**211.6457**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1369**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**	**0.0000**	**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0816	0.0592	0.6417	2.0500e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688		209.7823	209.7823	5.2600e-003	5.8100e-003	211.6457
Total	**0.0816**	**0.0592**	**0.6417**	**2.0500e-003**	**0.2555**	**1.1700e-003**	**0.2566**	**0.0678**	**1.0800e-003**	**0.0688**		**209.7823**	**209.7823**	**5.2600e-003**	**5.8100e-003**	**211.6457**

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

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.5601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**7.7517**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0734	0.0533	0.5776	1.8400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		188.8041	188.8041	4.7400e-003	5.2300e-003	190.4812
Total	**0.0734**	**0.0533**	**0.5776**	**1.8400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**188.8041**	**188.8041**	**4.7400e-003**	**5.2300e-003**	**190.4812**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.5601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**7.7517**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0734	0.0533	0.5776	1.8400e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		188.8041	188.8041	4.7400e-003	5.2300e-003	190.4812
Total	**0.0734**	**0.0533**	**0.5776**	**1.8400e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**188.8041**	**188.8041**	**4.7400e-003**	**5.2300e-003**	**190.4812**

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	lb/day										lb/day					
Mitigated	0.1171	3.4851	1.7801	0.0109	0.2779	0.0185	0.2964	0.0761	0.0177	0.0938		1,154.1075	1,154.1075	9.7600e-003	0.1803	1,208.0671
Unmitigated	0.1171	3.4851	1.7801	0.0109	0.2779	0.0185	0.2964	0.0761	0.0177	0.0938		1,154.1075	1,154.1075	9.7600e-003	0.1803	1,208.0671

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	96.04	96.04	96.04	110,386	110,386
City Park	0.87	2.18	2.43	3,148	3,148
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	96.91	98.22	98.47	113,535	113,535

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
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28

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

City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522
Other Non-Asphalt Surfaces	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522
Parking Lot	0.536987	0.052416	0.169237	0.150872	0.026159	0.006241	0.012518	0.016886	0.000471	0.000325	0.023246	0.001119	0.003522

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
NaturalGas Unmitigated	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	247.685	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0243**	**0.0204**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**		**29.1394**	**29.1394**	**5.6000e-004**	**5.3000e-004**	**29.3126**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0.247685	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003		29.1394	29.1394	5.6000e-004	5.3000e-004	29.3126
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0243**	**0.0204**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**		**29.1394**	**29.1394**	**5.6000e-004**	**5.3000e-004**	**29.3126**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355

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

Unmitigated	0.2038	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0373					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4300e-003	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Total	**0.2038**	**1.4000e-004**	**0.0155**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0333**	**0.0333**	**9.0000e-005**		**0.0355**

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

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0373					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4300e-003	1.4000e-004	0.0155	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0333	0.0333	9.0000e-005		0.0355
Total	**0.2038**	**1.4000e-004**	**0.0155**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0333**	**0.0333**	**9.0000e-005**		**0.0355**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Lodi Thornton Road Truck Stop Construction Emissions

CalEEMod Run: Lodi Thornton Rd Truck Stop Project - San Joaquin County, Annual
Timestamp: 10/28/2022 5:23 PM

Annual Construction Emissions (tons/year)

Phase	ROG	NO_x	CO	SO_x	PM_{10} (Total)	$PM_{2.5}$ (Total)
on site	0.02	0.19	0.13	0.00	0.07	0.04
off site	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation 2023	**0.02**	**0.19**	**0.13**	**0.00**	**0.07**	**0.04**
on site	0.03	0.36	0.30	0.00	0.08	0.05
off site	0.00	0.00	0.01	0.00	0.00	0.00
Grading 2023	**0.04**	**0.36**	**0.30**	**0.00**	**0.08**	**0.05**
on site	0.05	0.47	0.53	0.00	0.02	0.02
off site	0.01	0.05	0.11	0.00	0.04	0.01
Building Construction 2023	**0.06**	**0.52**	**0.64**	**0.00**	**0.07**	**0.03**
on site	0.02	0.18	0.24	0.00	0.01	0.01
off site	0.00	0.00	0.01	0.00	0.00	0.00
Paving 2023	**0.02**	**0.18**	**0.26**	**0.00**	**0.01**	**0.01**
on site	0.07	0.01	0.02	0.00	0.00	0.00
off site	0.00	0.00	0.01	0.00	0.00	0.00
Architectural Coating 2023	**0.07**	**0.01**	**0.02**	**0.00**	**0.00**	**0.00**
Annual Total	**0.21**	**1.26**	**1.35**	**0.00**	**0.24**	**0.13**
Significance threshold (tons/year)	10.00	10.00	100.00	27.00	15.00	15.00
Exceed threshold?	No	No	No	No	No	No

Summer On-site Construction Maximum Daily Emissions (lbs/day)

Model File: Lodi Thornton Rd Truck Stop Project - San Joaquin County, Summer
Timestamp: 10/28/2022 5:30 PM

Activity by Year	ROG	NO_x	CO	SO_x	PM_{10} (Total)	$PM_{2.5}$ (Total)
Site Preparation 2023	2.66	27.52	18.24	0.04	10.11	5.71
Grading 2023	1.71	17.94	14.75	0.03	3.96	2.25
Building Construction 2023	1.57	14.38	16.24	0.03	0.70	0.66
Paving 2023	1.14	8.79	12.19	0.02	0.44	0.40
Architectural Coating 2023	7.75	1.30	1.81	0.00	0.07	0.07
Max Daily	7.75	27.52	18.24	0.04	10.11	5.71
Screening threshold	-	100	-	-	100	100
Exceed screening threshold?	-	No	-	-	No	No

Winter On-site Construction Maximum Daily Emissions (lbs/day)

Model File: Lodi Thornton Rd Truck Stop Project - San Joaquin County, Summer
Timestamp: 10/28/2022 5:30 PM

Activity by Year	ROG	NO_x	CO	SO_x	PM_{10} (Total)	$PM_{2.5}$ (Total)
Site Preparation 2023	2.66	27.52	18.24	0.04	10.11	5.71
Grading 2023	1.71	17.94	14.75	0.03	3.96	2.25
Building Construction 2023	1.57	14.38	16.24	0.03	0.70	0.66
Paving 2023	1.14	8.79	12.19	0.02	0.44	0.40
Architectural Coating 2023	7.75	1.30	1.81	0.00	0.07	0.07
Max Daily	7.75	27.52	18.24	0.04	10.11	5.71
Screening threshold	-	100	-	-	100	100
Exceed screening threshold?	-	No	-	-	No	No

Project Operational Emissions Summary

CalEEMod Run: Lodi Thornton Rd Truck Stop Project - San Joaquin County, Annual
Timestamp: 10/28/2022 5:23 PM

Emissions Source	ROG	NO_x	CO	SO2	PM_{10} (Total)	$PM_{2.5}$ (Total)
	Tons per Year					
Area	0.04	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.02	0.61	0.31	0.00	0.05	0.02
Waste	-	-	-	-	-	-
Water	-	-	-	-	-	-
Total	**0.06**	**0.62**	**0.32**	0.00	**0.05**	**0.02**
SJVAPCD Significance Thresholds	10	10	100	27	15	10
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Summer Operation Maximum Daily Emissions (lbs/day)

CalEEMod Run: Lodi Thornton Rd Truck Stop Project - San Joaquin County, Summer
Timestamp: 10/28/2022 5:30 PM

Emissions Source	ROG	NO_x	CO	SO2	PM_{10} (Total)	$PM_{2.5}$ (Total)
	Pounds Per Day					
Area	0.20	0.00	0.02	0.00	0.00	0.00
Energy	0.00	0.02	0.02	0.00	0.00	0.00
Mobile	0.13	3.24	1.73	0.01	0.30	0.09
Waste	-	-	-	-	-	-
Water	-	-	-	-	-	-
Total	**0.34**	**3.26**	**1.77**	**0.01**	**0.30**	**0.10**
SJVAPCD Significance Thresholds	100	100	100	100	100	100
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Winter Operation Maximum Daily Emissions (lbs/day)

CalEEMod Run: Lodi Thornton Rd Truck Stop Project - San Joaquin County, Winter
Timestamp: 10/28/2022 5:30 PM

Emissions Source	ROG	NO_x	CO	SO2	PM_{10} (Total)	$PM_{2.5}$ (Total)
	Pounds Per Day					
Area	0.20	0.00	0.02	0.00	0.00	0.00
Energy	0.00	0.02	0.02	0.00	0.00	0.00
Mobile	0.12	3.49	1.78	0.01	0.30	0.09
Waste	-	-	-	-	-	-
Water	-	-	-	-	-	-
Total	**0.32**	**3.51**	**1.82**	**0.01**	**0.30**	**0.10**
SJVAPCD Significance Thresholds	100	100	100	100	100	100
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Operation Maximum Daily Emissions (lbs/day)

Emissions Source	ROG	NO_x	CO	SO2	PM_{10} (Total)	$PM_{2.5}$ (Total)
	Pounds Per Day					
Area	0.20	0.00	0.02	0.00	0.00	0.00
Energy	0.00	0.02	0.02	0.00	0.00	0.00
Mobile	0.13	3.49	1.78	0.01	0.30	0.09
Waste	-	-	-	-	-	-
Water	-	-	-	-	-	-
Total	**0.34**	**3.51**	**1.82**	**0.01**	**0.30**	**0.10**
SJVAPCD Significance Thresholds	100	100	100	100	100	100
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**