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April 19, 2022 Project 02576.00036.001

Mr. Josh Kinkade
Associate Planner
City of Folsom, Community Development Department
50 Natoma Street
Folsom, CA 95630

Subject: AC Hotel by Marriott Project Air Quality and Greenhouse Gas Emissions Assessment

Dear Mr. Kinkade:

HELIX Environmental Planning, Inc. (HELIX) has assessed the air quality and greenhouse gas (GHG) emissions associated with the construction and operation of the proposed AC Hotel by Marriott Project (project). Analysis within this report was prepared to support impact analysis pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations).

PROJECT LOCATION

The project site is comprised of a 1.45-acre portion of Assessor's Parcel Number (APN) 072-308-042 located in the southeastern corner of the intersection of East Bidwell Street and Broadstone Parkway in the City of Folsom (City), California. The project site is in the middle of an existing parking lot, and is bounded by Via Serena to the northeast, Broadstone Parkway to the west, the Palladio at Broadstone Shopping Center to the east, and Palladio Parkway to the south. Access to the project site would be provided by two 27-foot-wide driveways that would be accessible by Via Serena, Broadstone Parkway, Palladio Parkway, and East Bidwell Street. See Attachment A for Figure 1, *Vicinity Map*, and Figure 2, *Site Plan*.

PROJECT DESCRIPTION

The proposed project includes the construction of a new hotel on a 1.45-acre project site within a total 14.22-acre parcel. A total of 130 hotel rooms and 8 executive units would be constructed in an "L-shaped" five (5) story tower. The first floor of the five-story hotel would be 16,000 square feet (sf), the second floor would be 17,423 sf, and floors three through five would be 17,350 sf. The total square footage of the hotel building would be 85,473 sf. The hotel building would include indoor and outdoor amenities including a lobby and lounge area, an outdoor patio, a library, office space, a restaurant and bar, a fitness center, meeting rooms, restrooms, a kitchen, a laundry room, and pedestrian/ bicycle

pathways. Other site improvements include associated hotel parking, utility connection lines, a solid waste collection enclosure, signage, lighting, and landscaping.

AIR QUALITY/GREENHOUSE GAS EMISSIONS ANALYSIS

The City of Folsom lies within the eastern edge of the Sacramento Valley Air Basin (SVAB). The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for implementing emissions standards and other requirements of federal and state laws in the project area. As required by the California Clean Air Act (CCAA), SMAQMD has published various air quality planning documents as discussed below to address requirements to bring the SVAB into compliance with the federal and state ambient air quality standards. The Air Quality Attainment Plans are incorporated into the State Implementation Plan (SIP), which is subsequently submitted to the U.S. Environmental Protection Agency (EPA), the federal agency that administrates the Federal Clean Air Act of 1970, as amended in 1990.

Climate in the Folsom area is characterized by hot, dry summers and cool, rainy winters. During summer's longer daylight hours, plentiful sunshine provides the energy needed to fuel photochemical reactions between Oxides of Nitrogen (NO_X) and Reactive Organic Gasses (ROG), which result in Ozone (O_3) formation. High concentrations of O_3 are reached in the Folsom area due to intense heat, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer. The greatest pollution problem in the Folsom area is from NO_X.

Regulatory Setting

Air Quality

Criteria Pollutants

Ambient air quality is described in terms of compliance with state and national standards, and the levels of air pollutant concentrations considered safe, to protect the public health and welfare. These standards are designed to protect people most sensitive to respiratory distress, such as people with asthma, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. The EPA has established national ambient air quality standards (NAAQS) for seven air pollution constituents. As permitted by the Clean Air Act, California has adopted more stringent air emissions standards (California Ambient Air Quality Standards, or CAAQS) and expanded the number of regulated air constituents.

The California Air Resources Board (CARB) is required to designate areas of the state as attainment, nonattainment, or unclassified for any state standard. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A "nonattainment" designation indicates that a pollutant concentration violated the standard at least once. The air quality attainment status of the SVAB, including the City of Folsom, is shown in **Table 1.**

Sacramento County is designated as nonattainment for the state and federal ozone standards, the state PM_{10} standards, and the federal $PM_{2.5}$ standards. Concentrations of all other pollutants meet state and federal standards.

Table 1. Sacramento County – Attainment Status

POLLUTANT	STATE OF CALIFORNIA ATTAINMENT STATUS	FEDERAL ATTAINMENT STATUS
Ozone (1-hour)	Nonattainment	No Federal Standard
Ozone (8-hour)	Nonattainment	Nonattainment
Coarse Particulate Matter (PM_{10})	Nonattainment	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Attainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment/Unclassified
Nitrogen Dioxide ($N0_2$)	Attainment	Attainment/Unclassified
Lead	Attainment	Attainment/Unclassified
Sulfur Dioxide (SO_2)	Attainment	Unclassified
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Visibility Reducing Particles	Unclassified	No Federal Standard

Sources: SMAQMD 2020.

Ozone is not emitted directly into the environment, but is generated from complex chemical reactions between ROG, or non-methane hydrocarbons, and NO_X that occur in the presence of sunlight. ROG and NO_X generators in Sacramento County include motor vehicles, recreational boats, other transportation sources, and industrial processes. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations, and windblown dust.

Toxic Air Contaminants

Toxic air contaminants (TAC) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs can cause long-term chronic health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For carcinogenic TACs, there is no level of exposure that is considered safe and impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

The Health and Safety Code (§39655[a]) defines TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." All substances that are listed as hazardous air pollutants pursuant to subsection (b) of Section 112 of the CAA (42 United States Code Sec. 7412[b]) are designated as TACs. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is referred to as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter (CARB 2022). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a notable effect on California's population—it is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB 2022).

Greenhouse Gases

Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as greenhouse gasses (GHGs) because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: burning of fossil fuels during motorized transport; electricity generation; natural gas consumption; industrial activity; manufacturing; and other activities such as deforestation, agricultural activity, and solid waste decomposition.

The GHGs defined under California's Assembly Bill (AB) 32, described below, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Estimates of GHG emissions are commonly presented in carbon dioxide equivalents (CO_2e), which weigh each gas by its global warming potential (GWP). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. GHG emissions quantities in this analysis are presented in metric tons (MT) of CO_2e. For consistency with United Nations Standards, modeling, and reporting of GHGs in California and the U.S. use the GWPs defined in the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report (IPCC 2007): CO_2 – 1; CH_4 – 25; N_2O – 298.

GHG Reduction Regulations and Plans

The primary GHG reduction regulatory legislation and plans (applicable to the project) at the State, regional, and local levels are described below. Implementation of California's GHG reduction mandates is primarily under the authority of CARB at the state level, SMAQMD and the Sacramento Area Council of Governments (SACOG) at the regional level, and the City at the local level.

Executive Order S-3-05: On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by

2050. Executive Orders are not laws and can only provide the governor's direction to state agencies to act within their authority to reinforce existing laws.

Assembly Bill 32 – Global Warming Solution Act of 2006: The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed by AB 32 to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

Executive Order B-30-15: On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28 nation European Union. California is on track to meet or exceed the target of reducing GHGs emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

Senate Bill 32: Signed into law by Governor Brown on September 8, 2016, Senate Bill (SB) 32 (Amendments to the California Global Warming Solutions Action of 2006) extends California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

California Air Resources Board: On December 11, 2008, the CARB adopted the Climate Change Scoping Plan (Scoping Plan) as directed by AB 32. The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, the use of renewable sources for electricity generation, regional transportation targets, and green building strategy. Relative to transportation, the Scoping Plan includes nine measures or recommended actions related to reducing vehicle miles traveled (VMT) and vehicle GHGs through fuel and efficiency measures. These measures would be implemented statewide rather than on a project-by-project basis (CARB 2008).

In response to EO B-30-15 and SB 32, all state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down emissions (CARB 2014). In December 2017, CARB adopted the 2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target, to reflect the 2030 target set by EO B-30-15 and codified by SB 32 (CARB 2017).

Sacramento Area Council of Governments: As required by the Sustainable Communities and Climate Protection Act of 2008 (SB 375), SACOG has developed the 2020 Metropolitan Transportation Plan and

Sustainable Communities Strategy. This plan seeks to reduce GHG and other mobile source emissions through coordinated transportation and land use planning to reduce VMT.

City of Folsom: As part of the 2035 General Plan, the City prepared an integrated Greenhouse Gas Emissions Reduction Strategy (Appendix A to the 2035 General Plan; adopted August 28, 2018). The purpose of the Greenhouse Gas Emissions Reduction Strategy (GHG Strategy) is to identify and reduce current and future community GHG emissions and those associated with the City's municipal operations. The GHG Strategy includes GHG reduction targets to reduce GHG emissions (with a 2005 baseline year) by 15 percent in 2020, 51 percent in 2035, and 80 percent in 2050. The GHG Strategy identifies policies within the City of Folsom General Plan that would decrease the City's emissions of greenhouse gases. The GHG Strategy also satisfies the requirements of CEQA to identify and mitigate GHG emissions associated with the General Plan Update as part of the environmental review process and serves as the City's "plan for the reduction of greenhouse gases", per Section 15183.5 of the CEQA Guidelines, which provides the opportunity for tiering and streamlining of project-level emissions for certain types of discretionary projects subject to CEQA review that are consistent with the General Plan (City 2018).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005; OEHHA 2015).

Residential areas are considered sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children and infants are considered more susceptible to health effects of air pollution due to their immature immune systems, developing organs, and higher breathing rates. As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities.

The closest existing sensitive receptors to the project site are the apartments in the Sherwood at Broadstone Apartment complex, approximately 230 feet southwest of the project site at the intersection of Clarksville Road and Broadstone Parkway. The closest school to the project site is Gold Ridge Elementary School approximately 2,226 feet (0.42 mile) to the southwest.

METHODOLOGY AND ASSUMPTIONS

Criteria pollutant, precursor, and GHG emissions for project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission

factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and default data used in the model are available in the CalEEMod User's Guide, Appendices A, D, and E (CAPCOA 2021). The CalEEMod output files are included in Attachment B to this letter.

Construction of the project is anticipated to begin as early as March 2023 and be completed in February 2025. Construction modeling assumes the longest anticipated schedule reported by the project applicant: demolition 20 days; site preparation two days; grading 87 days; building construction 394 days; and paving 10 days. A significant level of architectural coating is not anticipated to be used as building exterior materials would be pre-finished. Construction equipment assumptions were based on estimates from the project applicant and CalEEMod defaults. An estimated 4,500 cubic yards (CY) of cut/fill was included as soil movement during grading and 3,500 CY of import of soil was included during grading. Additionally, approximately 10 trucks of vegetation and other cleared materials would be exported during the site preparation phase, and approximately 10 trucks of demolition debris would be hauled off site during demolition. Construction emissions modeling assumes implementation of dust mitigation (watering exposed areas twice per day) to comply with the requirements of: SMAQMD Rule 403, *Fugitive Dust*.

Operational mobile emissions were modeled using the project trip generation of 504 average daily trips, including 38 new AM peak-hour vehicle trips and six new PM peak-hour vehicle trips, from the project Transportation Impact Study (T. Kear Transportation Planning and Management, Inc. 2022). Operational Emissions resulting from energy use, water use, and solid waste generation were modeled using CalEEMod defaults with an added 20 percent reduction in water use to account for the requirements of the 2019 CalGreen, and an additional 25 percent solid waste diversion to account for AB 341 requirements.

STANDARDS OF SIGNIFICANCE

Air Quality

While the final determination of whether or not a project has a significant effect is within the purview of the lead agency pursuant to CEQA Guidelines Section 15064(b), SMAQMD recommends that its air pollution thresholds be used to determine the significance of project emissions. The criteria pollutant thresholds and various assessment recommendations are contained in SMAQMD's *Guide to Air Quality Assessment in Sacramento County* (CEQA Guide; 2020, revised), and are discussed under the checklist questions below.

Greenhouse Gas Emissions

The final determination of whether or not a project has a significant effect is within the purview of the lead agency pursuant to CEQA Guidelines Section 15064(b). The City's GHG Strategy, described above, is a qualified plan for the reduction of greenhouse gases pursuant to CEQA Guidelines Section 15183.5. Consistency with the GHG Strategy may be used to determine the significance of the project's GHG emissions.

The City's 2035 General Plan Policy NCR 3.2.8 and GHG Strategy include criteria to determine whether the potential greenhouse gas emissions of a proposed project are significant (City 2018).

NCR 3.2.8 Streamlined GHG Analysis for Projects Consistent with the General Plan

Projects subject to environmental review under CEQA may be eligible for tiering and streamlining the analysis of GHG emissions, provided they are consistent with the GHG reduction measures included in the General Plan and EIR. The City may review such projects to determine whether the following criteria are met:

- Proposed project is consistent with the current general plan land use designation for the project site;
- Proposed project incorporates all applicable GHG reduction measures (as documented in the Climate Change Technical Appendix to the General Plan EIR) as mitigation measures in the CEQA document prepared for the project; and,
- Proposed project clearly demonstrates the method, timing and process for which the project will comply with applicable GHG reduction measures and/or conditions of approval, (e.g., using a CAP/GHG reduction measures consistency checklist, mitigation monitoring and reporting plan, or other mechanism for monitoring and enforcement as appropriate).

AIR QUALITY IMPACT ANALYSIS

(1) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. In accordance with SMAQMD's CEQA Guide, construction-generated NO_X, PM_{10}, and $PM_{2.5}$, and operation-generated ROG and NO_X (all ozone precursors) are used to determine consistency with the Ozone Attainment Plan. The Guide states (SMAQMD 2020 p. 4-6):

> *By exceeding the District's mass emission thresholds for operational emissions of ROG, NO_X, PM_{10}, or $PM_{2.5}$, the project would be considered to conflict with or obstruct implementation of the District's air quality planning efforts.*

As shown in the discussion for question 2) below, the project's construction-generated emissions of NO_X, PM_{10}, and $PM_{2.5}$ and operation-generated emissions ROG and NO_X would not exceed SMAQMD thresholds. The project would not conflict with or obstruct implementation of the applicable air quality plan and the impact would be less than significant.

(2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Program region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The Sacramento region is in non-attainment for ozone (ozone precursors NO_X and ROG) and particulate matter ($PM_{2.5}$ and PM_{10}). The project's emissions of these criteria pollutants and precursors during construction and operation are evaluated below.

Construction Emissions

CalEEMod version 2020.4.0 was used to quantify project-generated construction emissions. Assumptions included in the model are described previously and detailed model output sheets are included in Attachment B. Construction activities were assumed to commence as early as March 2023

and be completed in early 2025. The quantity, duration, and intensity of construction activity influence the amount of construction emissions and related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction activity is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of: (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in CalEEMod; and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

The project's construction period emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ are compared to the SMAQMD construction thresholds in **Table 2.** The SMAQMD does not have a recommended threshold for construction-generated ROG. However, quantification and disclosure of ROG emissions is recommended. The SMAQMD considers any emissions of PM_{10} and $PM_{2.5}$ to be significant unless the Basic Construction Emissions Control Practices are implemented, also known as Best Management Practices (BMPs). The project would implement all of the SMAQMD BMPs to control fugitive dust in accordance with SMAQMD Rule 403. The modeling accounts for emissions reductions resulting from watering exposed surfaces twice daily. As shown in **Table 2**, the proposed project construction period emissions of the ozone precursor NO_X, PM_{10}, and $PM_{2.5}$ would not exceed the SMAQMD thresholds. Impacts related to construction-generated emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ would be less than significant.

Table 2
CONSTRUCTION CRITERIA POLLUTANT AND PRECURSER EMISSIONS

Construction Activity	ROG (pounds/day)	NO_X (pounds/day)	PM_{10} (pounds/day)	$PM_{2.5}$ (pounds/day)
Demolition	1.5	14.5	0.9	0.7
Site Preparation	1.2	14.5	3.6	1.9
Grading	1.4	15.3	4.0	2.1
Building Construction	1.6	12.5	0.9	0.6
Paving	0.6	5.3	0.3	0.2
Maximum Daily Emissions	**1.6**	**15.3**	**4.0**	**2.1**
SMAQMD Thresholds	*None*	*85*	*80*	*82*
Exceed Thresholds?	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Attachment B)
ROG = reactive organic gases; NO_X = nitrogen oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; SMAQMD= Sacramento Metropolitan Air Quality Management District

Operational Emissions

Emissions generated from operational activities would include:

- Areas sources – combustion emissions from the use of landscape maintenance equipment, the reapplication of architectural coatings for maintenance, and the use of consumer products.

- Energy sources – combustion emissions from the use of natural gas appliances, water heaters, and heating systems.

- Mobile emissions – combustion, fuel evaporation, brake and tire wear, and road dust emission resulting from worker, customer, and vendor vehicle traveling to and from the project site.

- Offroad emissions – combustion emissions from backup emergency generators.

The results of the modeling for project operational activities are shown in **Table 3**, *Maximum Daily Operational Emissions*. The data is presented as the maximum anticipated daily emissions for comparison with the SMAQMD thresholds, the model output and calculation sheets are included as Attachment B to this letter. As shown in **Table 3**, the proposed project operation period emissions of the ozone precursors NO_X and ROG, PM_{10}, and $PM_{2.5}$ would not exceed the SMAQMD thresholds. Impacts related to operation-generated emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ would be less than significant.

Table 3
MAXIMUM DAILY OPERATIONAL EMISSIONS

Source	ROG (pounds/day)	NO_X (pounds/day)	PM_{10} (pounds/day)	$PM_{2.5}$ (pounds/day)
Area	2.1	<0.01	<0.01	<0.01
Energy	0.1	0.9	0.1	0.1
Mobile	1.0	1.2	1.7	0.4
Offroad	<0.01	0.1	<0.01	<0.01
Maximum Daily Emissions	**3.2**	**2.2**	**1.7**	**0.5**
SMAQMD Thresholds	*65*	*65*	*80*	*82*
Exceed Thresholds?	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Attachment B)
ROG = reactive organic gases; NO_X = nitrogen oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; SMAQMD= Sacramento Metropolitan Air Quality Management District

The project's maximum daily construction or operational emissions would not exceed the SMAQMD's thresholds. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, and the impact would be less than significant.

(3) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. CARB and OEHHA have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005, OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptor locations. Examples of these sensitive receptor locations are residences, schools, hospitals, and daycare centers.

The closest existing sensitive receptors to the project site are apartments in the Sherwood at Broadstone Apartment complex, approximately 230 feet southwest of the project site at the intersection of Clarksville Road and Broadstone Parkway. The closest school to the project site is Gold Ridge Elementary School approximately 2,226 feet (0.42 mile) to the southwest.

The dose (of TAC) to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a fixed quantity of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from OEHHA) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities. Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (OEHHA 2015). In addition, concentrations of mobile source DPM emissions disperse rapidly and are typically reduced by 70 percent at approximately 500-feet (CARB 2005). Considering this information, the highly dispersive nature of DPM, and the fact that construction activities would occur at various locations throughout the project site, it is not anticipated that construction of the project would expose sensitive receptors to substantial DPM concentrations.

According to the SMAQMD, land use development projects do not typically have the potential to result in localized concentrations of criteria air pollutants that expose sensitive receptors to substantial pollutant concentrations. This is because criteria air pollutants are predominantly generated in the form of mobile-source exhaust from vehicle trips associated with the land use development project. These vehicle trips occur throughout a paved network of roads, and, therefore, associated exhaust emissions of criteria air pollutants are not generated in a single location where high concentrations could be formed (SMAQMD 2020). Therefore, localized concentration of CO from exhaust emissions, or "CO hotspots," would only be a concern on high-volume roadways where vertical and/or horizontal mixing is substantially limited, such as tunnels or below grade highways. There are no high-volume roadways in the region with limited mixing that would be affected by project generated traffic. Once operational, the project would not be a significant source of TACs. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations, and the impact would be less than significant.

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

Less than Significant Impact. The project could produce odors during construction activities resulting from heavy diesel equipment exhaust and VOC released during application of asphalt. The odor of these emissions is objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not be at a level that would affect a substantial number of people. Any odors emitted during construction activities would be temporary, short-term, and intermittent in nature, and would cease upon the facility maintenance. As a result, impacts associated with temporary odors during construction are not considered significant.

As a hotel development, operation of the project would not result in odors affecting a substantial number of people. Solid waste generated by the project would be collected by a contracted waste

hauler, ensuring that any odors resulting from on-site waste would be managed and collected in a manner to prevent the proliferation of odors. The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and the impact would be less than significant.

GHG EMISSIONS IMPACT ANALYSIS

(1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact with Mitigation. GHG emissions would be generated by the project during construction (vehicle engine exhaust from construction equipment, on-road hauling trucks, vendor trips, and worker commuting trips) and during long-term operation (electricity and natural gas use, electricity resulting from water consumption; solid waste disposal, and vehicle engine exhaust).

GHG emissions were calculated used CalEEMod, as described in Methodology and Assumptions. The results of the 2025 Operational GHG Emissions are disclosed below in **Table 4.** Additionally, the results of Construction GHG Emissions are disclosed below in **Table 5.**

Table 4
OPERATIONAL GHG EMISSIONS

Emission Sources	2025 Emissions (MT CO_2e)
Area	<0.01
Energy	306.9
Mobile	259.9
Offroad	0.1
Waste	28.5
Water	4.2
Subtotal[1]	**599.7**

Source: CalEEMod (output data is provided in Attachment B)
[1] Totals may not sum due to rounding.
GHG = greenhouse gas; MT = metric tons; CO_2e = carbon dioxide equivalent

Table 5
CONSTRUCTION GHG EMISSIONS

Year of Emissions	Emissions (MT CO_2e)
2023	246.92
2024	300.54
2025	32.53
SMAQMD Construction Threshold	*1,100*

Source: CalEEMod (output data is provided in Attachment B)

To determine significance of the project's GHG emissions, the City's Greenhouse Gas Reduction Strategy Consistency Checklist was completed (City of Folsom 2021a; included as Attachment C)

Part 1: Land Use Consistency

The proposed project is consistent with the City's 2035 General Plan land use and zoning designations?

The project parcel is designated as Regional Commercial Center (RCC) in the Folsom 2035 General Plan. The zoning designation of the project site is General Commercial District (C-3) Planned Development (PD). In accordance with the Greenhouse Gas Reduction Strategy Consistency Checklist, if the project would require a change in land use designation or a rezone, consistency would be determined by calculating the estimated the GHG emissions resulting from maximum buildout of the project site allowed using the current zoning and using the proposed zoning change. If the land use designation/zoning change would not result in an increase in annual GHG emissions, the project would be consistent (City 2021a). The project would not result in a land use designation/zoning change and therefore, there would be no change in GHG emissions.

A hotel would be an allowable use for the C-3 PD zoning district. The Planned Development District (PD) component of the zoning designation requires a Planned Development Permit Review (PD Permit) entitlement for design review purposes (Zoning Code 17.38.050). Preliminary design plans show that the five-story hotel building would be approximately 66 feet in height (with towers extending up to 73 feet in height), whereas the Palladio at Broadstone Development Standards indicate that the maximum height for major buildings is three stories and 60 feet in height. A PD Permit modification would be required to modify the Development Standards to accommodate the building stories and building height. The resulting maximum buildout for the project parcel under the existing zoning would be a hotel totaling 85,473 SF of floor space. Using CalEEMod and all model defaults, 85,473 SF of a hotel building would result in approximately 600 MT CO_2e per year.

Part 2: GHG Reduction Measures Consistency (only applicable measures shown):

E-1 Building Energy Sector: The project will meet one of the four Building Energy Sector standards in the GHG Reduction Measures Consistency Checklist?

Consistent with mitigation. Mitigation Measure GHG-01 would meet one of the four Building Energy Sector requirements of the GHG Reduction Measures Consistency Checklist (Attachment B).

T-1 Mix of Uses: The project is a mixed-use building with two or more uses (i.e., residential, commercial, office, etc.) or if the site is 5 acres or larger there are two or more uses on the site connected by protected pedestrian paths (e.g., sidewalks, elevated walkways) excluding driveways?

Consistent. The project is less than 5 acres and is located within the existing parking lot associated with the Palladio at Broadstone Shopping Center. Implementation of the proposed hotel development would include a mix of uses including office space, a library, a fitness center, laundry rooms, a restaurant and bar, and a kitchen. Sidewalks and/or pedestrian paths would

connect the hotel with adjacent land uses, including the Palladio at Broadstone Shopping Center.

T-3 Bicycle Parking: Project provides 5 percent more bicycle parking spaces than required in the City's Municipal Code?

Consistent with Mitigation. Mitigation Measure GHG-02 would require the installation of bicycle parking 5 percent or more higher than the requirements of City Code section 17.57.090.

T-6 High-Performance Diesel (Construction only): Use high-performance diesel (also known as Diesel-HPR or Reg-9000/RHD) for construction equipment?

Consistent with Mitigation. Mitigation Measure GHG-03 would require the use of high-performance diesel for all project construction activities.

T-8 Electric Vehicle Charging (Residential): For multifamily projects with 17 or more dwelling units, provide electric vehicle charging in 5 percent of total parking spaces?

Consistent. The project would provide 10 electrical vehicle charging stations, pursuant to the 2019 CalGreen Standards. The City used the CALGreen standard for land use designation, which classifies a hotel as a residential development, rather than a commercial development and calls for 10 EV parking spaces for a hotel with 151 to 200 parking spaces. Mandatory compliance with CalGreen regulations would ensure consistency with City General Plan GHG Reduction Measure T-8 for residential electric vehicle charging station standards.

SW-1 Enhanced Construction Waste Diversion: Project diverts to recycle or salvage at least 65 percent of nonhazardous construction and demolition waste generated at the project site in accordance with Appendix A4 (Residential) of CALGreen?

Mitigation Measure GHG-04 would require a minimum of 65 percent of nonhazardous construction and demolition waste to be diverted, recycled or salvaged.

W-1 Water Efficiency: For new residential and non-residential projects, the project will comply with all applicable indoor and outdoor water efficiency and conservation measures required under CALGreen Tier 1?

Mitigation Measure GHG-05 would require implementation of all 2019 CALGreen Tier 1 applicable indoor and outdoor water efficiency and conservation measures.

With implementation of Mitigation Measures GHG-01 through -05, the project would be consistent with the City's GHG Strategy. Therefore, the project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be less than significant with mitigation.

Mitigation Measure GHG-1: Building Energy Sector

In accordance with the City General Plan Reduction Measure E-1, the project shall meet one of the four Building Energy Sector Requirements of the GHG Reduction Measures Consistency Checklist

(Attachment B).

Mitigation Measure GHG-02: Bicycle Parking

In accordance with the City General Plan GHG Reduction Measure T-3, the project shall provide a minimum of 5 percent more bicycle parking than required in the City's Municipal Code Section 17.57.090.

Mitigation Measure GHG-03: High-Performance Diesel

In accordance with the City General Plan GHG Reduction Measure T-6, the project shall use high-performance diesel (also known as Diesel-HPR or Reg-9000/RHD) for all diesel-powered equipment utilized in construction of the project.

Mitigation Measure GHG-04: Enhanced Construction Waste Diversion

In accordance with the City General Plan GHG Reduction Measure SW-1, the project shall divert to recycle or salvage a minimum 65 of nonhazardous construction and demolition waste generated at the project site in accordance with Appendix A5 (Residential) of the as outlined in the California Green Building Standards Code (2019 CALGreen).

Mitigation Measure GHG-05: Water Efficiency

In accordance with the City General Plan GHG Reduction Measure W-1, the project shall comply with all applicable indoor and outdoor water efficiency and conservation measures required under 2019 CALGreen Tier 1, as outlined in the California Green Building Standards Code.

(2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Less than Significant Impact with Mitigation. There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan and policy is AB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 32 would require further reductions of 40 percent below 1990 levels by 2030. The mandates of AB 32 and SB 32 are implanted at the state level by the CARB's Scoping Plan. Because the project's operational year is post-2020, the project aims to reach the quantitative goals set by SB 32. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the LCFS, and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the project level is not addressed. Therefore, the proposed project would not conflict with those plans and regulations.

The Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for Sacramento County is the 2020 MTP/SCS adopted by the SACOG on November 18, 2019. The 2020 MTP/SCS lays out a transportation investment and land use strategy to support a prosperous region, with access to jobs and economic opportunity, transportation options, and affordable housing that works for all residents. The plan also lays out a path for improving our air quality, preserving open space and natural resources, and helping California achieve its goal to reduce greenhouse gas emissions (SACOG 2019). The

transportation sector is the largest source of GHG emissions in the state. A project's GHG emissions from cars and light trucks are directly correlated to the project's vehicle miles traveled (VMT). According to the Transportation Impact Study (TIS) prepared for the project, the Project is anticipated to generate at least 15 percent less VMT per capita than the regional average (T. Kear Transportation Planning and Management, Inc. 2022). This VMT reduction meets the 15 percent reduction required by SB 743. In addition to regional VMT projections, SACOG utilizes local growth projections to develop the strategies and measures in the 2020 MTP/SCS. As discussed in question a), above, there would be no change in land use and zoning, and no change in GHG emissions would result. Therefore, the regional VMT and population growth resulting from implementation of the project would be consistent with the assumptions used in the 2020 MTP/SCS.

As discussed in question a), above, with implementation of Mitigation Measures GHG-01 through GHG-05, the project would be consistent with the City's GHG Strategy, a qualified plan for the reduction of greenhouse gases pursuant to CEQA Guidelines Section 15183.5. Therefore, the project would not conflict with CARB's 2017 Scoping Plan, the SACOG's 2020 MTP/SCS, or the City's GHG Strategy, and the impact would be less than significant with mitigation.

SUMMARY

As described above, emissions of criteria pollutants would be below SMAQMD thresholds, and the project would not conflict with the Regional Ozone Plan or applicable portions of the SIP. Sensitive receptors would not be exposed to substantial concentrations of TACs or odors. Impacts to air quality would be less than significant and no mitigation measures would be required. The proposed project would be consistent with the City's 2035 General Plan land use and zoning designations and would not conflict with the City's GHG Strategy, CARB's 2017 Scoping Plan, and the SACOG's 2020 MTP/SCS, with implementation of Mitigation Measures GHG-01 through -05. Impacts related to GHG emissions would be less than significant with mitigation required.

Sincerely,

Victor Ortiz
Senior Air Quality Specialist

Attachments:

Attachment A: Figures
Attachment B: CalEEMod Output
Attachment C: Greenhouse Gas Reduction Strategy Consistency Checklist

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California Air Pollution Control Officers Association (CAPCOA). 2021. User's Guide for CalEEMod Version 2020.4.0. Available at: http://www.caleemod.com/.

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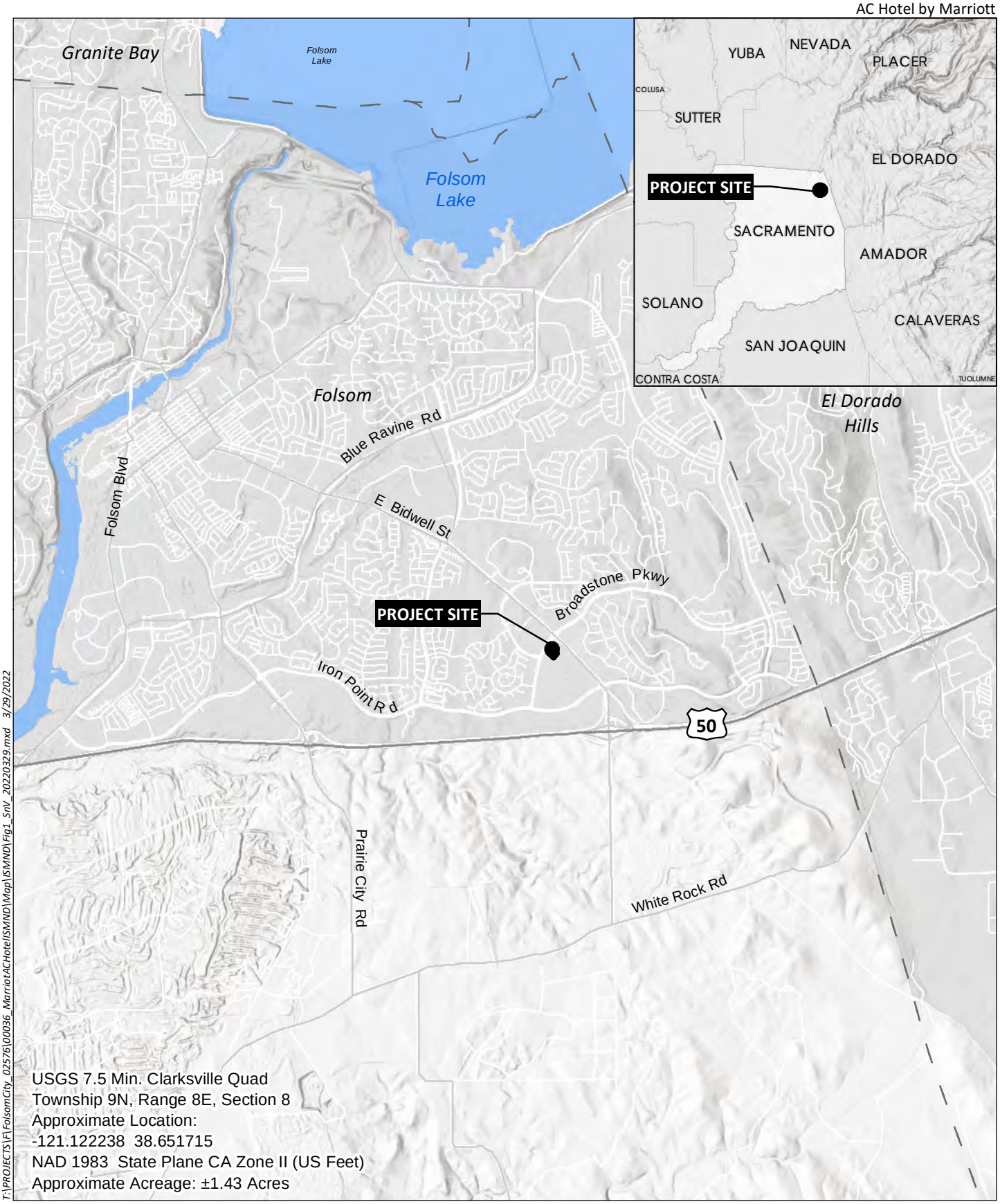
Sacramento Metropolitan Air Quality Management District (SMAQMD). 2020. Guide to Air Quality Assessment in Sacramento County. Revised April. Available at: http://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools.

T. Kear Transportation Planning and Management, Inc. April 2022. AC Hotel by Marriott Transportation Impact Study.

Attachment A

Figures



USGS 7.5 Min. Clarksville Quad
Township 9N, Range 8E, Section 8
Approximate Location:
-121.122238 38.651715
NAD 1983 State Plane CA Zone II (US Feet)
Approximate Acreage: ±1.43 Acres

0 1 Miles

Source: Base Map Layers (Esri, USGS, NGA, NASA)

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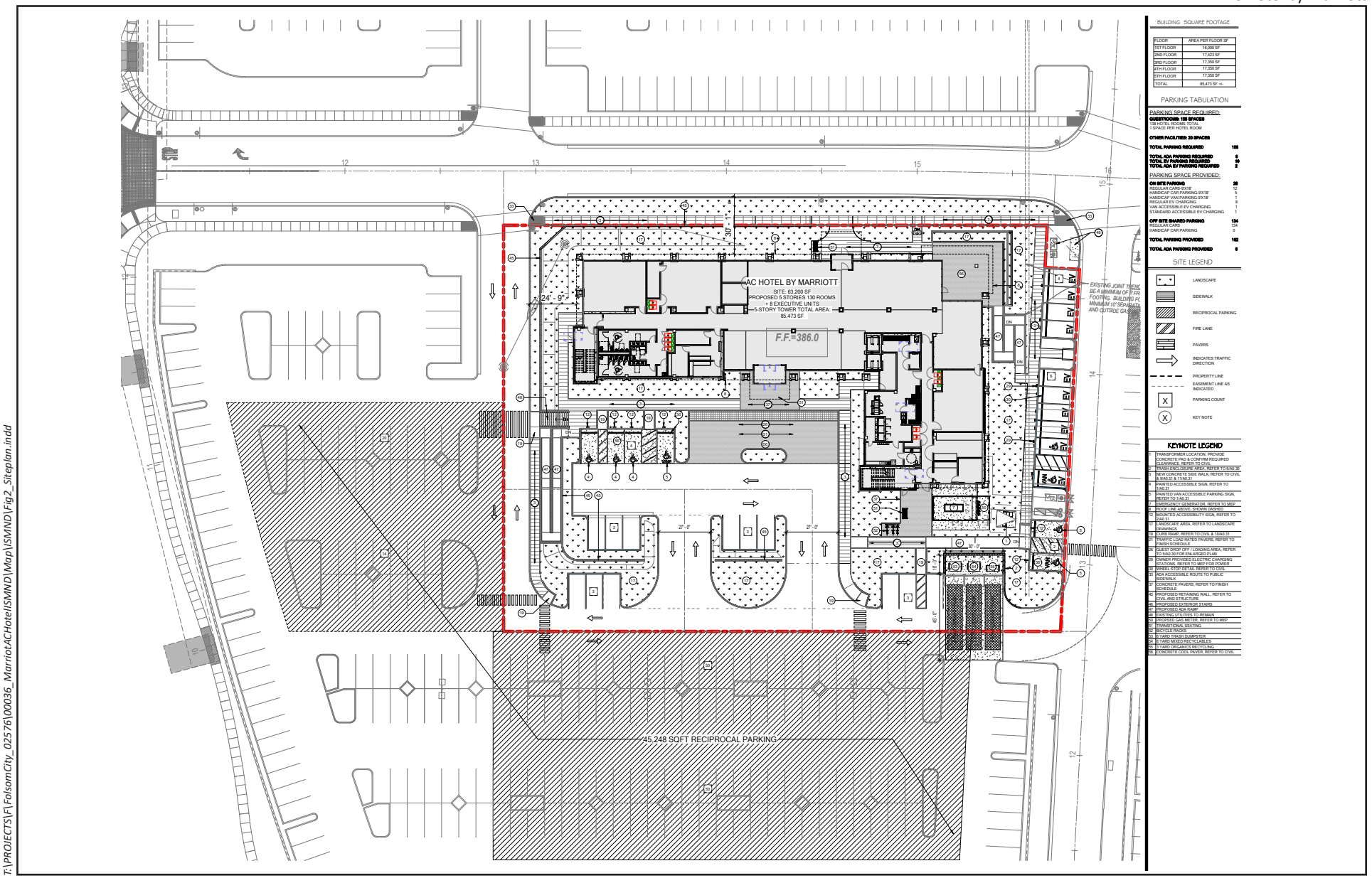
HELIX Environmental Planning

Vicinity Map

Figure 1



Sources: Mayse & Associates, 2022

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HELIX Environmental Planning

Site Plan

Figure 2

Attachment B

CalEEMod Output

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

AC Hotel by Marriott

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	138.00	Room	1.45	85,473.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2025
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The project site is 1.45 acres and project development is 85,473 square feet.

Construction Phase - Construction based on assumptions provided by Applicant.

Demolition -

Grading -

Vehicle Trips - T. Kear 2022

Construction Off-road Equipment Mitigation -

Water Mitigation -

Waste Mitigation -

Operational Off-Road Equipment - Emergency generator per information from Applicant.

Area Coating -

Water And Wastewater -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	394.00
tblConstructionPhase	NumDays	4.00	87.00
tblGrading	MaterialExported	0.00	200.00
tblGrading	MaterialImported	0.00	3,500.00
tblLandUse	LandUseSquareFeet	200,376.00	85,473.00
tblLandUse	LotAcreage	4.60	1.45
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	12.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	84.00	103.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	0.20
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	ST_TR	8.19	3.66
tblVehicleTrips	SU_TR	5.95	3.66
tblVehicleTrips	WD_TR	8.36	3.66

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1658	1.5033	1.2850	2.8100e-003	0.3441	0.0622	0.4063	0.1597	0.0586	0.2184	0.0000	244.2282	244.2282	0.0495	4.8800e-003	246.9214
2024	0.2009	1.5444	1.7677	3.5200e-003	0.0454	0.0597	0.1050	0.0123	0.0576	0.0699	0.0000	297.8255	297.8255	0.0412	5.6500e-003	300.5387
2025	0.0195	0.1546	0.1989	3.8000e-004	4.4600e-003	5.8000e-003	0.0103	1.2100e-003	5.5500e-003	6.7500e-003	0.0000	32.2497	32.2497	5.4200e-003	4.9000e-004	32.5321
Maximum	**0.2009**	**1.5444**	**1.7677**	**3.5200e-003**	**0.3441**	**0.0622**	**0.4063**	**0.1597**	**0.0586**	**0.2184**	**0.0000**	**297.8255**	**297.8255**	**0.0495**	**5.6500e-003**	**300.5387**

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	0.1658	1.5033	1.2850	2.8100e-003	0.1698	0.0622	0.2320	0.0759	0.0586	0.1345	0.0000	244.2280	244.2280	0.0495	4.8800e-003	246.9212
2024	0.2009	1.5444	1.7677	3.5200e-003	0.0454	0.0597	0.1050	0.0123	0.0576	0.0699	0.0000	297.8253	297.8253	0.0412	5.6500e-003	300.5385
2025	0.0195	0.1546	0.1989	3.8000e-004	4.4600e-003	5.8000e-003	0.0103	1.2100e-003	5.5500e-003	6.7500e-003	0.0000	32.2497	32.2497	5.4200e-003	4.9000e-004	32.5321
Maximum	**0.2009**	**1.5444**	**1.7677**	**3.5200e-003**	**0.1698**	**0.0622**	**0.2320**	**0.0759**	**0.0586**	**0.1345**	**0.0000**	**297.8253**	**297.8253**	**0.0495**	**5.6500e-003**	**300.5385**

AC Hotel by Marriott - Sacramento County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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**	**44.25**	**0.00**	**33.42**	**48.37**	**0.00**	**28.41**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-1-2023**	**5-31-2023**	0.5394	0.5394
2	**6-1-2023**	**8-31-2023**	0.5180	0.5180
3	**9-1-2023**	**11-30-2023**	0.4586	0.4586
4	**12-1-2023**	**2-29-2024**	0.4424	0.4424
5	**3-1-2024**	**5-31-2024**	0.4376	0.4376
6	**6-1-2024**	**8-31-2024**	0.4371	0.4371
7	**9-1-2024**	**11-30-2024**	0.4333	0.4333
8	**12-1-2024**	**2-28-2025**	0.3191	0.3191
		Highest	0.5394	0.5394

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3736	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4200e-003	3.4200e-003	1.0000e-005	0.0000	3.6500e-003
Energy	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	305.1577	305.1577	0.0154	4.6600e-003	306.9308
Mobile	0.1940	0.2071	1.4864	2.7600e-003	0.2879	2.2700e-003	0.2902	0.0770	2.1200e-003	0.0791	0.0000	255.0911	255.0911	0.0214	0.0145	259.9433
Offroad	0.0000	3.8000e-004	3.9200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1144	0.1144	0.0000	0.0000	0.1145
Waste						0.0000	0.0000		0.0000	0.0000	15.3360	0.0000	15.3360	0.9063	0.0000	37.9942
Water						0.0000	0.0000		0.0000	0.0000	1.2385	3.0533	4.2918	4.5400e-003	2.7300e-003	5.2182
Total	**0.5852**	**0.3678**	**1.6266**	**3.7200e-003**	**0.2879**	**0.0145**	**0.3024**	**0.0770**	**0.0143**	**0.0913**	**16.5745**	**563.4198**	**579.9943**	**0.9476**	**0.0219**	**610.2046**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3736	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4200e-003	3.4200e-003	1.0000e-005	0.0000	3.6500e-003
Energy	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	305.1577	305.1577	0.0154	4.6600e-003	306.9308
Mobile	0.1940	0.2071	1.4864	2.7600e-003	0.2879	2.2700e-003	0.2902	0.0770	2.1200e-003	0.0791	0.0000	255.0911	255.0911	0.0214	0.0145	259.9433
Offroad	0.0000	3.8000e-004	3.9200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1144	0.1144	0.0000	0.0000	0.1145
Waste						0.0000	0.0000		0.0000	0.0000	11.5020	0.0000	11.5020	0.6798	0.0000	28.4957
Water						0.0000	0.0000		0.0000	0.0000	0.9908	2.4426	3.4334	3.6400e-003	2.1800e-003	4.1746
Total	**0.5852**	**0.3678**	**1.6266**	**3.7200e-003**	**0.2879**	**0.0145**	**0.3024**	**0.0770**	**0.0143**	**0.0913**	**12.4928**	**562.8092**	**575.3020**	**0.7202**	**0.0213**	**599.6624**

	ROG	NOx	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**	**24.63**	**0.11**	**0.81**	**24.00**	**2.51**	**1.73**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2023	3/28/2023	5	20	
2	Site Preparation	Site Preparation	3/29/2023	3/30/2023	5	2	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3	Grading	Grading	3/31/2023	7/31/2023	5	87	
4	Building Construction	Building Construction	8/1/2023	2/1/2025	5	394	
5	Paving	Paving	2/2/2025	2/14/2025	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 87

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	20.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	25.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	438.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	36.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					2.2300e-003	0.0000	2.2300e-003	3.4000e-004	0.0000	3.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202
Total	**0.0147**	**0.1432**	**0.1346**	**2.4000e-004**	**2.2300e-003**	**6.7700e-003**	**9.0000e-003**	**3.4000e-004**	**6.3300e-003**	**6.6700e-003**	**0.0000**	**21.0866**	**21.0866**	**5.3500e-003**	**0.0000**	**21.2202**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

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	3.0000e-005	1.5900e-003	3.2000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6213	0.6213	2.0000e-005	1.0000e-004	0.6513
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.3000e-004	3.0200e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	0.0000	2.6000e-004	0.0000	0.7565	0.7565	2.0000e-005	2.0000e-005	0.7636
Total	**4.0000e-004**	**1.8200e-003**	**3.3400e-003**	**2.0000e-005**	**1.1200e-003**	**2.0000e-005**	**1.1400e-003**	**3.0000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.3778**	**1.3778**	**4.0000e-005**	**1.2000e-004**	**1.4149**

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					1.0000e-003	0.0000	1.0000e-003	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202
Total	**0.0147**	**0.1432**	**0.1346**	**2.4000e-004**	**1.0000e-003**	**6.7700e-003**	**7.7700e-003**	**1.5000e-004**	**6.3300e-003**	**6.4800e-003**	**0.0000**	**21.0865**	**21.0865**	**5.3500e-003**	**0.0000**	**21.2202**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

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	3.0000e-005	1.5900e-003	3.2000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6213	0.6213	2.0000e-005	1.0000e-004	0.6513
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.3000e-004	3.0200e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	0.0000	2.6000e-004	0.0000	0.7565	0.7565	2.0000e-005	2.0000e-005	0.7636
Total	**4.0000e-004**	**1.8200e-003**	**3.3400e-003**	**2.0000e-005**	**1.1200e-003**	**2.0000e-005**	**1.1400e-003**	**3.0000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.3778**	**1.3778**	**4.0000e-005**	**1.2000e-004**	**1.4149**

3.3 Site Preparation - 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					6.2900e-003	0.0000	6.2900e-003	3.0100e-003	0.0000	3.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	**1.1300e-003**	**0.0124**	**6.6400e-003**	**2.0000e-005**	**6.2900e-003**	**5.1000e-004**	**6.8000e-003**	**3.0100e-003**	**4.7000e-004**	**3.4800e-003**	**0.0000**	**1.5114**	**1.5114**	**4.9000e-004**	**0.0000**	**1.5236**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

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	3.0000e-005	1.9900e-003	4.0000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.3000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.7766	0.7766	3.0000e-005	1.2000e-004	0.8141
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0466	0.0466	0.0000	0.0000	0.0470
Total	**5.0000e-005**	**2.0000e-003**	**5.9000e-004**	**1.0000e-005**	**2.7000e-004**	**1.0000e-005**	**2.9000e-004**	**8.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**0.8232**	**0.8232**	**3.0000e-005**	**1.2000e-004**	**0.8611**

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					2.8300e-003	0.0000	2.8300e-003	1.3500e-003	0.0000	1.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	**1.1300e-003**	**0.0124**	**6.6400e-003**	**2.0000e-005**	**2.8300e-003**	**5.1000e-004**	**3.3400e-003**	**1.3500e-003**	**4.7000e-004**	**1.8200e-003**	**0.0000**	**1.5114**	**1.5114**	**4.9000e-004**	**0.0000**	**1.5236**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

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	3.0000e-005	1.9900e-003	4.0000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.3000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.7766	0.7766	3.0000e-005	1.2000e-004	0.8141
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0466	0.0466	0.0000	0.0000	0.0470
Total	**5.0000e-005**	**2.0000e-003**	**5.9000e-004**	**1.0000e-005**	**2.7000e-004**	**1.0000e-005**	**2.9000e-004**	**8.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**0.8232**	**0.8232**	**3.0000e-005**	**1.2000e-004**	**0.8611**

3.4 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					0.3085	0.0000	0.3085	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.6293	0.3786	9.0000e-004		0.0263	0.0263		0.0242	0.0242	0.0000	78.7520	78.7520	0.0255	0.0000	79.3888
Total	**0.0580**	**0.6293**	**0.3786**	**9.0000e-004**	**0.3085**	**0.0263**	**0.3347**	**0.1490**	**0.0242**	**0.1732**	**0.0000**	**78.7520**	**78.7520**	**0.0255**	**0.0000**	**79.3888**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

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	5.8000e-004	0.0349	7.0000e-003	1.4000e-004	3.7000e-003	2.5000e-004	3.9600e-003	1.0200e-003	2.4000e-004	1.2600e-003	0.0000	13.6066	13.6066	5.4000e-004	2.1600e-003	14.2630
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	1.2500e-003	7.7000e-004	0.0101	3.0000e-005	3.1900e-003	2.0000e-005	3.2100e-003	8.5000e-004	2.0000e-005	8.7000e-004	0.0000	2.5312	2.5312	8.0000e-005	7.0000e-005	2.5551
Total	**1.8300e-003**	**0.0356**	**0.0171**	**1.7000e-004**	**6.8900e-003**	**2.7000e-004**	**7.1700e-003**	**1.8700e-003**	**2.6000e-004**	**2.1300e-003**	**0.0000**	**16.1378**	**16.1378**	**6.2000e-004**	**2.2300e-003**	**16.8181**

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					0.1388	0.0000	0.1388	0.0671	0.0000	0.0671	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.6293	0.3786	9.0000e-004		0.0263	0.0263		0.0242	0.0242	0.0000	78.7519	78.7519	0.0255	0.0000	79.3887
Total	**0.0580**	**0.6293**	**0.3786**	**9.0000e-004**	**0.1388**	**0.0263**	**0.1651**	**0.0671**	**0.0242**	**0.0913**	**0.0000**	**78.7519**	**78.7519**	**0.0255**	**0.0000**	**79.3887**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

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	5.8000e-004	0.0349	7.0000e-003	1.4000e-004	3.7000e-003	2.5000e-004	3.9600e-003	1.0200e-003	2.4000e-004	1.2600e-003	0.0000	13.6066	13.6066	5.4000e-004	2.1600e-003	14.2630
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	1.2500e-003	7.7000e-004	0.0101	3.0000e-005	3.1900e-003	2.0000e-005	3.2100e-003	8.5000e-004	2.0000e-005	8.7000e-004	0.0000	2.5312	2.5312	8.0000e-005	7.0000e-005	2.5551
Total	**1.8300e-003**	**0.0356**	**0.0171**	**1.7000e-004**	**6.8900e-003**	**2.7000e-004**	**7.1700e-003**	**1.8700e-003**	**2.6000e-004**	**2.1300e-003**	**0.0000**	**16.1378**	**16.1378**	**6.2000e-004**	**2.2300e-003**	**16.8181**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0830	0.6382	0.6873	1.2000e-003		0.0280	0.0280		0.0271	0.0271	0.0000	98.9715	98.9715	0.0168	0.0000	99.3917
Total	**0.0830**	**0.6382**	**0.6873**	**1.2000e-003**		**0.0280**	**0.0280**		**0.0271**	**0.0271**	**0.0000**	**98.9715**	**98.9715**	**0.0168**	**0.0000**	**99.3917**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9000e-004	0.0372	0.0112	1.5000e-004	4.4700e-003	2.0000e-004	4.6600e-003	1.2900e-003	1.9000e-004	1.4800e-003	0.0000	14.1513	14.1513	3.5000e-004	2.0800e-003	14.7788
Worker	5.6200e-003	3.4800e-003	0.0456	1.2000e-004	0.0144	8.0000e-005	0.0145	3.8300e-003	7.0000e-005	3.9000e-003	0.0000	11.4167	11.4167	3.7000e-004	3.3000e-004	11.5243
Total	**6.6100e-003**	**0.0407**	**0.0568**	**2.7000e-004**	**0.0189**	**2.8000e-004**	**0.0192**	**5.1200e-003**	**2.6000e-004**	**5.3800e-003**	**0.0000**	**25.5680**	**25.5680**	**7.2000e-004**	**2.4100e-003**	**26.3031**

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	0.0830	0.6382	0.6873	1.2000e-003		0.0280	0.0280		0.0271	0.0271	0.0000	98.9714	98.9714	0.0168	0.0000	99.3916
Total	**0.0830**	**0.6382**	**0.6873**	**1.2000e-003**		**0.0280**	**0.0280**		**0.0271**	**0.0271**	**0.0000**	**98.9714**	**98.9714**	**0.0168**	**0.0000**	**99.3916**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9000e-004	0.0372	0.0112	1.5000e-004	4.4700e-003	2.0000e-004	4.6600e-003	1.2900e-003	1.9000e-004	1.4800e-003	0.0000	14.1513	14.1513	3.5000e-004	2.0800e-003	14.7788
Worker	5.6200e-003	3.4800e-003	0.0456	1.2000e-004	0.0144	8.0000e-005	0.0145	3.8300e-003	7.0000e-005	3.9000e-003	0.0000	11.4167	11.4167	3.7000e-004	3.3000e-004	11.5243
Total	**6.6100e-003**	**0.0407**	**0.0568**	**2.7000e-004**	**0.0189**	**2.8000e-004**	**0.0192**	**5.1200e-003**	**2.6000e-004**	**5.3800e-003**	**0.0000**	**25.5680**	**25.5680**	**7.2000e-004**	**2.4100e-003**	**26.3031**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9108	237.9108	0.0396	0.0000	238.9013
Total	**0.1860**	**1.4494**	**1.6398**	**2.8900e-003**		**0.0590**	**0.0590**		**0.0570**	**0.0570**	**0.0000**	**237.9108**	**237.9108**	**0.0396**	**0.0000**	**238.9013**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e-003	0.0876	0.0261	3.4000e-004	0.0107	4.7000e-004	0.0112	3.1000e-003	4.5000e-004	3.5500e-003	0.0000	33.3690	33.3690	8.2000e-004	4.9100e-003	34.8518
Worker	0.0126	7.4400e-003	0.1019	2.9000e-004	0.0346	1.8000e-004	0.0348	9.2100e-003	1.6000e-004	9.3700e-003	0.0000	26.5457	26.5457	8.0000e-004	7.4000e-004	26.7857
Total	**0.0149**	**0.0951**	**0.1280**	**6.3000e-004**	**0.0454**	**6.5000e-004**	**0.0460**	**0.0123**	**6.1000e-004**	**0.0129**	**0.0000**	**59.9148**	**59.9148**	**1.6200e-003**	**5.6500e-003**	**61.6375**

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	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9105	237.9105	0.0396	0.0000	238.9010
Total	**0.1860**	**1.4494**	**1.6398**	**2.8900e-003**		**0.0590**	**0.0590**		**0.0570**	**0.0570**	**0.0000**	**237.9105**	**237.9105**	**0.0396**	**0.0000**	**238.9010**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e-003	0.0876	0.0261	3.4000e-004	0.0107	4.7000e-004	0.0112	3.1000e-003	4.5000e-004	3.5500e-003	0.0000	33.3690	33.3690	8.2000e-004	4.9100e-003	34.8518
Worker	0.0126	7.4400e-003	0.1019	2.9000e-004	0.0346	1.8000e-004	0.0348	9.2100e-003	1.6000e-004	9.3700e-003	0.0000	26.5457	26.5457	8.0000e-004	7.4000e-004	26.7857
Total	**0.0149**	**0.0951**	**0.1280**	**6.3000e-004**	**0.0454**	**6.5000e-004**	**0.0460**	**0.0123**	**6.1000e-004**	**0.0129**	**0.0000**	**59.9148**	**59.9148**	**1.6200e-003**	**5.6500e-003**	**61.6375**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0152	0.1198	0.1431	2.5000e-004		4.5100e-003	4.5100e-003		4.3500e-003	4.3500e-003	0.0000	20.8877	20.8877	3.4100e-003	0.0000	20.9730
Total	**0.0152**	**0.1198**	**0.1431**	**2.5000e-004**		**4.5100e-003**	**4.5100e-003**		**4.3500e-003**	**4.3500e-003**	**0.0000**	**20.8877**	**20.8877**	**3.4100e-003**	**0.0000**	**20.9730**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	7.5400e-003	2.2400e-003	3.0000e-005	9.4000e-004	4.0000e-005	9.8000e-004	2.7000e-004	4.0000e-005	3.1000e-004	0.0000	2.8701	2.8701	7.0000e-005	4.2000e-004	2.9978
Worker	1.0400e-003	5.9000e-004	8.3500e-003	2.0000e-005	3.0400e-003	1.0000e-005	3.0600e-003	8.1000e-004	1.0000e-005	8.2000e-004	0.0000	2.2516	2.2516	6.0000e-005	6.0000e-005	2.2713
Total	**1.2300e-003**	**8.1300e-003**	**0.0106**	**5.0000e-005**	**3.9800e-003**	**5.0000e-005**	**4.0400e-003**	**1.0800e-003**	**5.0000e-005**	**1.1300e-003**	**0.0000**	**5.1217**	**5.1217**	**1.3000e-004**	**4.8000e-004**	**5.2691**

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	0.0152	0.1198	0.1431	2.5000e-004		4.5100e-003	4.5100e-003		4.3500e-003	4.3500e-003	0.0000	20.8877	20.8877	3.4100e-003	0.0000	20.9729
Total	**0.0152**	**0.1198**	**0.1431**	**2.5000e-004**		**4.5100e-003**	**4.5100e-003**		**4.3500e-003**	**4.3500e-003**	**0.0000**	**20.8877**	**20.8877**	**3.4100e-003**	**0.0000**	**20.9729**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	7.5400e-003	2.2400e-003	3.0000e-005	9.4000e-004	4.0000e-005	9.8000e-004	2.7000e-004	4.0000e-005	3.1000e-004	0.0000	2.8701	2.8701	7.0000e-005	4.2000e-004	2.9978
Worker	1.0400e-003	5.9000e-004	8.3500e-003	2.0000e-005	3.0400e-003	1.0000e-005	3.0600e-003	8.1000e-004	1.0000e-005	8.2000e-004	0.0000	2.2516	2.2516	6.0000e-005	6.0000e-005	2.2713
Total	**1.2300e-003**	**8.1300e-003**	**0.0106**	**5.0000e-005**	**3.9800e-003**	**5.0000e-005**	**4.0400e-003**	**1.0800e-003**	**5.0000e-005**	**1.1300e-003**	**0.0000**	**5.1217**	**5.1217**	**1.3000e-004**	**4.8000e-004**	**5.2691**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8700e-003	0.0266	0.0440	7.0000e-005		1.2300e-003	1.2300e-003		1.1400e-003	1.1400e-003	0.0000	5.8868	5.8868	1.8700e-003	0.0000	5.9334
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8700e-003**	**0.0266**	**0.0440**	**7.0000e-005**		**1.2300e-003**	**1.2300e-003**		**1.1400e-003**	**1.1400e-003**	**0.0000**	**5.8868**	**5.8868**	**1.8700e-003**	**0.0000**	**5.9334**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	9.0000e-005	1.3100e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3535	0.3535	1.0000e-005	1.0000e-005	0.3566
Total	**1.6000e-004**	**9.0000e-005**	**1.3100e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3535**	**0.3535**	**1.0000e-005**	**1.0000e-005**	**0.3566**

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	2.8700e-003	0.0266	0.0440	7.0000e-005		1.2300e-003	1.2300e-003		1.1400e-003	1.1400e-003	0.0000	5.8868	5.8868	1.8700e-003	0.0000	5.9334
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8700e-003**	**0.0266**	**0.0440**	**7.0000e-005**		**1.2300e-003**	**1.2300e-003**		**1.1400e-003**	**1.1400e-003**	**0.0000**	**5.8868**	**5.8868**	**1.8700e-003**	**0.0000**	**5.9334**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	9.0000e-005	1.3100e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3535	0.3535	1.0000e-005	1.0000e-005	0.3566
Total	**1.6000e-004**	**9.0000e-005**	**1.3100e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3535**	**0.3535**	**1.0000e-005**	**1.0000e-005**	**0.3566**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1940	0.2071	1.4864	2.7600e-003	0.2879	2.2700e-003	0.2902	0.0770	2.1200e-003	0.0791	0.0000	255.0911	255.0911	0.0214	0.0145	259.9433
Unmitigated	0.1940	0.2071	1.4864	2.7600e-003	0.2879	2.2700e-003	0.2902	0.0770	2.1200e-003	0.0791	0.0000	255.0911	255.0911	0.0214	0.0145	259.9433

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	505.08	505.08	505.08	776,969	776,969
Total	505.08	505.08	505.08	776,969	776,969

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
Hotel	10.00	5.00	6.50	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.546433	0.056674	0.183423	0.128799	0.024661	0.005883	0.013276	0.009437	0.000898	0.000581	0.025768	0.000959	0.003207

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.7388	130.7388	0.0121	1.4600e-003	131.4754
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.7388	130.7388	0.0121	1.4600e-003	131.4754
NaturalGas Mitigated	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	174.4189	174.4189	3.3400e-003	3.2000e-003	175.4554
NaturalGas Unmitigated	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	174.4189	174.4189	3.3400e-003	3.2000e-003	175.4554

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	3.26849e+006	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	174.4189	174.4189	3.3400e-003	3.2000e-003	175.4554
Total		**0.0176**	**0.1602**	**0.1346**	**9.6000e-004**		**0.0122**	**0.0122**		**0.0122**	**0.0122**	**0.0000**	**174.4189**	**174.4189**	**3.3400e-003**	**3.2000e-003**	**175.4554**

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					
Hotel	3.26849e+006	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	174.4189	174.4189	3.3400e-003	3.2000e-003	175.4554
Total		**0.0176**	**0.1602**	**0.1346**	**9.6000e-004**		**0.0122**	**0.0122**		**0.0122**	**0.0122**	**0.0000**	**174.4189**	**174.4189**	**3.3400e-003**	**3.2000e-003**	**175.4554**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	805156	130.7388	0.0121	1.4600e-003	131.4754
Total		**130.7388**	**0.0121**	**1.4600e-003**	**131.4754**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	805156	130.7388	0.0121	1.4600e-003	131.4754
Total		**130.7388**	**0.0121**	**1.4600e-003**	**131.4754**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3736	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4200e-003	3.4200e-003	1.0000e-005	0.0000	3.6500e-003
Unmitigated	0.3736	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4200e-003	3.4200e-003	1.0000e-005	0.0000	3.6500e-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	0.0396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3338					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4200e-003	3.4200e-003	1.0000e-005	0.0000	3.6500e-003
Total	**0.3736**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.4200e-003**	**3.4200e-003**	**1.0000e-005**	**0.0000**	**3.6500e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3338					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4200e-003	3.4200e-003	1.0000e-005	0.0000	3.6500e-003
Total	**0.3736**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.4200e-003**	**3.4200e-003**	**1.0000e-005**	**0.0000**	**3.6500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

AC Hotel by Marriott - Sacramento County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.4334	3.6400e-003	2.1800e-003	4.1746
Unmitigated	4.2918	4.5400e-003	2.7300e-003	5.2182

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	3.50061 / 0.388957	4.2918	4.5400e-003	2.7300e-003	5.2182
Total		**4.2918**	**4.5400e-003**	**2.7300e-003**	**5.2182**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.80049 / 0.311166	3.4334	3.6400e-003	2.1800e-003	4.1746
Total		**3.4334**	**3.6400e-003**	**2.1800e-003**	**4.1746**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.5020	0.6798	0.0000	28.4957
Unmitigated	15.3360	0.9063	0.0000	37.9942

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	75.55	15.3360	0.9063	0.0000	37.9942
Total		**15.3360**	**0.9063**	**0.0000**	**37.9942**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	56.6625	11.5020	0.6798	0.0000	28.4957
Total		**11.5020**	**0.6798**	**0.0000**	**28.4957**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	0.20	12	103	0.74	CNG

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

UnMitigated/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
Equipment Type	tons/yr										MT/yr					
Generator Sets	0.0000	3.8000e-004	3.9200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1144	0.1144	0.0000	0.0000	0.1145
Total	**0.0000**	**3.8000e-004**	**3.9200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.1144**	**0.1144**	**0.0000**	**0.0000**	**0.1145**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

AC Hotel by Marriott

Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	138.00	Room	1.45	85,473.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2025
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The project site is 1.45 acres and project development is 85,473 square feet.

Construction Phase - Construction based on assumptions provided by Applicant.

Demolition -

Grading -

Vehicle Trips - T. Kear 2022

Construction Off-road Equipment Mitigation -

Water Mitigation -

Waste Mitigation -

Operational Off-Road Equipment - Emergency generator per information from Applicant.

Area Coating -

Water And Wastewater -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	394.00
tblConstructionPhase	NumDays	4.00	87.00
tblGrading	MaterialExported	0.00	200.00
tblGrading	MaterialImported	0.00	3,500.00
tblLandUse	LandUseSquareFeet	200,376.00	85,473.00
tblLandUse	LotAcreage	4.60	1.45
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	12.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	84.00	103.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	0.20
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	ST_TR	8.19	3.66
tblVehicleTrips	SU_TR	5.95	3.66
tblVehicleTrips	WD_TR	8.36	3.66

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	1.6487	15.3057	13.7977	0.0270	7.2548	0.6783	7.8654	3.4702	0.6344	4.0322	0.0000	2,572.4481	2,572.4481	0.6614	0.1374	2,627.7573
2024	1.5377	11.8105	13.5152	0.0268	0.3582	0.4555	0.8137	0.0969	0.4395	0.5364	0.0000	2,500.5990	2,500.5990	0.3476	0.0481	2,523.6066
2025	1.4356	11.1392	13.3810	0.0267	0.3582	0.3973	0.7555	0.0969	0.3831	0.4800	0.0000	2,487.8213	2,487.8213	0.4138	0.0469	2,510.2886
Maximum	**1.6487**	**15.3057**	**13.7977**	**0.0270**	**7.2548**	**0.6783**	**7.8654**	**3.4702**	**0.6344**	**4.0322**	**0.0000**	**2,572.4481**	**2,572.4481**	**0.6614**	**0.1374**	**2,627.7573**

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	1.6487	15.3057	13.7977	0.0270	3.3548	0.6783	3.9654	1.5859	0.6344	2.1479	0.0000	2,572.4481	2,572.4481	0.6614	0.1374	2,627.7573
2024	1.5377	11.8105	13.5152	0.0268	0.3582	0.4555	0.8137	0.0969	0.4395	0.5364	0.0000	2,500.5990	2,500.5990	0.3476	0.0481	2,523.6066
2025	1.4356	11.1392	13.3810	0.0267	0.3582	0.3973	0.7555	0.0969	0.3831	0.4800	0.0000	2,487.8213	2,487.8213	0.4138	0.0469	2,510.2886
Maximum	**1.6487**	**15.3057**	**13.7977**	**0.0270**	**3.3548**	**0.6783**	**3.9654**	**1.5859**	**0.6344**	**2.1479**	**0.0000**	**2,572.4481**	**2,572.4481**	**0.6614**	**0.1374**	**2,627.7573**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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**	**48.93**	**0.00**	**41.34**	**51.43**	**0.00**	**37.32**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0475	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0302	0.0302	8.0000e-005		0.0322
Energy	0.0966	0.8779	0.7375	5.2700e-003		0.0667	0.0667		0.0667	0.0667		1,053.5012	1,053.5012	0.0202	0.0193	1,059.7617
Mobile	1.0095	1.2150	8.9081	0.0149	1.6381	0.0125	1.6506	0.4367	0.0117	0.4484		1,519.0922	1,519.0922	0.1417	0.0924	1,550.1542
Offroad	8.2000e-004	0.0639	0.6540	2.0000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	21.0089	21.0089	7.8000e-004		21.0283
Total	**3.1544**	**2.1569**	**10.3136**	**0.0204**	**1.6381**	**0.0811**	**1.7192**	**0.4367**	**0.0803**	**0.5170**	**0.0000**	**2,593.6325**	**2,593.6325**	**0.1627**	**0.1117**	**2,630.9763**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0475	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0302	0.0302	8.0000e-005		0.0322
Energy	0.0966	0.8779	0.7375	5.2700e-003		0.0667	0.0667		0.0667	0.0667		1,053.5012	1,053.5012	0.0202	0.0193	1,059.7617
Mobile	1.0095	1.2150	8.9081	0.0149	1.6381	0.0125	1.6506	0.4367	0.0117	0.4484		1,519.0922	1,519.0922	0.1417	0.0924	1,550.1542
Offroad	8.2000e-004	0.0639	0.6540	2.0000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	21.0089	21.0089	7.8000e-004		21.0283
Total	**3.1544**	**2.1569**	**10.3136**	**0.0204**	**1.6381**	**0.0811**	**1.7192**	**0.4367**	**0.0803**	**0.5170**	**0.0000**	**2,593.6325**	**2,593.6325**	**0.1627**	**0.1117**	**2,630.9763**

	ROG	NOx	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	Demolition	Demolition	3/1/2023	3/28/2023	5	20	
2	Site Preparation	Site Preparation	3/29/2023	3/30/2023	5	2	
3	Grading	Grading	3/31/2023	7/31/2023	5	87	
4	Building Construction	Building Construction	8/1/2023	2/1/2025	5	394	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Paving	Paving	2/2/2025	2/14/2025	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 87

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

AC Hotel by Marriott - Sacramento County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Demolition	5	13.00	0.00	20.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	25.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	438.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	36.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					0.2231	0.0000	0.2231	0.0338	0.0000	0.0338			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**0.2231**	**0.6766**	**0.8997**	**0.0338**	**0.6328**	**0.6666**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

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	2.5900e-003	0.1625	0.0323	6.3000e-004	0.0174	1.1600e-003	0.0186	4.7800e-003	1.1100e-003	5.8900e-003		68.5097	68.5097	2.7200e-003	0.0109	71.8149
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	0.0388	0.0258	0.3077	8.0000e-004	0.0989	5.1000e-004	0.0994	0.0262	4.7000e-004	0.0267		81.2817	81.2817	2.9200e-003	2.6100e-003	82.1313
Total	**0.0414**	**0.1883**	**0.3400**	**1.4300e-003**	**0.1163**	**1.6700e-003**	**0.1180**	**0.0310**	**1.5800e-003**	**0.0326**		**149.7914**	**149.7914**	**5.6400e-003**	**0.0135**	**153.9463**

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					0.1004	0.0000	0.1004	0.0152	0.0000	0.0152			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**0.1004**	**0.6766**	**0.7770**	**0.0152**	**0.6328**	**0.6480**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

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	2.5900e-003	0.1625	0.0323	6.3000e-004	0.0174	1.1600e-003	0.0186	4.7800e-003	1.1100e-003	5.8900e-003		68.5097	68.5097	2.7200e-003	0.0109	71.8149
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	0.0388	0.0258	0.3077	8.0000e-004	0.0989	5.1000e-004	0.0994	0.0262	4.7000e-004	0.0267		81.2817	81.2817	2.9200e-003	2.6100e-003	82.1313
Total	**0.0414**	**0.1883**	**0.3400**	**1.4300e-003**	**0.1163**	**1.6700e-003**	**0.1180**	**0.0310**	**1.5800e-003**	**0.0326**		**149.7914**	**149.7914**	**5.6400e-003**	**0.0135**	**153.9463**

3.3 Site Preparation - 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					6.2869	0.0000	6.2869	3.0072	0.0000	3.0072			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2869**	**0.5074**	**6.7943**	**3.0072**	**0.4668**	**3.4740**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

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	0.0323	2.0315	0.4038	7.8500e-003	0.2180	0.0145	0.2325	0.0597	0.0139	0.0736		856.3714	856.3714	0.0341	0.1358	897.6868
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	0.0239	0.0159	0.1894	4.9000e-004	0.0609	3.1000e-004	0.0612	0.0161	2.9000e-004	0.0164		50.0195	50.0195	1.8000e-003	1.6000e-003	50.5424
Total	**0.0562**	**2.0474**	**0.5932**	**8.3400e-003**	**0.2788**	**0.0149**	**0.2937**	**0.0758**	**0.0142**	**0.0900**		**906.3909**	**906.3909**	**0.0359**	**0.1374**	**948.2291**

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					2.8291	0.0000	2.8291	1.3533	0.0000	1.3533			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**2.8291**	**0.5074**	**3.3365**	**1.3533**	**0.4668**	**1.8200**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

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	0.0323	2.0315	0.4038	7.8500e-003	0.2180	0.0145	0.2325	0.0597	0.0139	0.0736		856.3714	856.3714	0.0341	0.1358	897.6868
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	0.0239	0.0159	0.1894	4.9000e-004	0.0609	3.1000e-004	0.0612	0.0161	2.9000e-004	0.0164		50.0195	50.0195	1.8000e-003	1.6000e-003	50.5424
Total	**0.0562**	**2.0474**	**0.5932**	**8.3400e-003**	**0.2788**	**0.0149**	**0.2937**	**0.0758**	**0.0142**	**0.0900**		**906.3909**	**906.3909**	**0.0359**	**0.1374**	**948.2291**

3.4 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					7.0909	0.0000	7.0909	3.4260	0.0000	3.4260			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0909**	**0.6044**	**7.6953**	**3.4260**	**0.5560**	**3.9820**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

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	0.0130	0.8182	0.1626	3.1600e-003	0.0878	5.8600e-003	0.0937	0.0240	5.6000e-003	0.0296		344.9110	344.9110	0.0137	0.0547	361.5511
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	0.0298	0.0199	0.2367	6.2000e-004	0.0761	3.9000e-004	0.0765	0.0202	3.6000e-004	0.0205		62.5244	62.5244	2.2500e-003	2.0000e-003	63.1779
Total	**0.0428**	**0.8381**	**0.3994**	**3.7800e-003**	**0.1639**	**6.2500e-003**	**0.1701**	**0.0442**	**5.9600e-003**	**0.0502**		**407.4353**	**407.4353**	**0.0160**	**0.0567**	**424.7290**

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					3.1909	0.0000	3.1909	1.5417	0.0000	1.5417			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**3.1909**	**0.6044**	**3.7953**	**1.5417**	**0.5560**	**2.0977**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

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	0.0130	0.8182	0.1626	3.1600e-003	0.0878	5.8600e-003	0.0937	0.0240	5.6000e-003	0.0296		344.9110	344.9110	0.0137	0.0547	361.5511
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	0.0298	0.0199	0.2367	6.2000e-004	0.0761	3.9000e-004	0.0765	0.0202	3.6000e-004	0.0205		62.5244	62.5244	2.2500e-003	2.0000e-003	63.1779
Total	**0.0428**	**0.8381**	**0.3994**	**3.7800e-003**	**0.1639**	**6.2500e-003**	**0.1701**	**0.0442**	**5.9600e-003**	**0.0502**		**407.4353**	**407.4353**	**0.0160**	**0.0567**	**424.7290**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

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	0.0181	0.6967	0.2110	2.6700e-003	0.0844	3.6600e-003	0.0880	0.0243	3.5000e-003	0.0278		286.3430	286.3430	7.0400e-003	0.0420	299.0482
Worker	0.1074	0.0715	0.8522	2.2300e-003	0.2739	1.4100e-003	0.2753	0.0726	1.3000e-003	0.0739		225.0877	225.0877	8.1000e-003	7.2200e-003	227.4406
Total	**0.1255**	**0.7682**	**1.0632**	**4.9000e-003**	**0.3582**	**5.0700e-003**	**0.3633**	**0.0969**	**4.8000e-003**	**0.1017**		**511.4306**	**511.4306**	**0.0151**	**0.0493**	**526.4887**

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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

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	0.0181	0.6967	0.2110	2.6700e-003	0.0844	3.6600e-003	0.0880	0.0243	3.5000e-003	0.0278		286.3430	286.3430	7.0400e-003	0.0420	299.0482
Worker	0.1074	0.0715	0.8522	2.2300e-003	0.2739	1.4100e-003	0.2753	0.0726	1.3000e-003	0.0739		225.0877	225.0877	8.1000e-003	7.2200e-003	227.4406
Total	**0.1255**	**0.7682**	**1.0632**	**4.9000e-003**	**0.3582**	**5.0700e-003**	**0.3633**	**0.0969**	**4.8000e-003**	**0.1017**		**511.4306**	**511.4306**	**0.0151**	**0.0493**	**526.4887**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0173	0.6831	0.2045	2.6200e-003	0.0843	3.6000e-003	0.0879	0.0243	3.4500e-003	0.0277		280.9253	280.9253	6.8400e-003	0.0413	293.4149
Worker	0.1005	0.0636	0.7935	2.1500e-003	0.2739	1.3400e-003	0.2752	0.0726	1.2300e-003	0.0739		217.7523	217.7523	7.3500e-003	6.7100e-003	219.9355
Total	**0.1178**	**0.7467**	**0.9980**	**4.7700e-003**	**0.3582**	**4.9400e-003**	**0.3631**	**0.0969**	**4.6800e-003**	**0.1016**		**498.6776**	**498.6776**	**0.0142**	**0.0481**	**513.3504**

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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0173	0.6831	0.2045	2.6200e-003	0.0843	3.6000e-003	0.0879	0.0243	3.4500e-003	0.0277		280.9253	280.9253	6.8400e-003	0.0413	293.4149
Worker	0.1005	0.0636	0.7935	2.1500e-003	0.2739	1.3400e-003	0.2752	0.0726	1.2300e-003	0.0739		217.7523	217.7523	7.3500e-003	6.7100e-003	219.9355
Total	**0.1178**	**0.7467**	**0.9980**	**4.7700e-003**	**0.3582**	**4.9400e-003**	**0.3631**	**0.0969**	**4.6800e-003**	**0.1016**		**498.6776**	**498.6776**	**0.0142**	**0.0481**	**513.3504**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248
Total	**1.3246**	**10.4128**	**12.4393**	**0.0221**		**0.3925**	**0.3925**		**0.3785**	**0.3785**		**2,002.1524**	**2,002.1524**	**0.3269**		**2,010.3248**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0166	0.6694	0.1997	2.5600e-003	0.0843	3.5300e-003	0.0879	0.0243	3.3800e-003	0.0277		275.2598	275.2598	6.7000e-003	0.0406	287.5188
Worker	0.0944	0.0570	0.7420	2.0800e-003	0.2739	1.2800e-003	0.2751	0.0726	1.1700e-003	0.0738		210.4091	210.4091	6.6900e-003	6.2700e-003	212.4450
Total	**0.1110**	**0.7264**	**0.9417**	**4.6400e-003**	**0.3582**	**4.8100e-003**	**0.3630**	**0.0969**	**4.5500e-003**	**0.1015**		**485.6689**	**485.6689**	**0.0134**	**0.0469**	**499.9638**

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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248
Total	**1.3246**	**10.4128**	**12.4393**	**0.0221**		**0.3925**	**0.3925**		**0.3785**	**0.3785**	**0.0000**	**2,002.1524**	**2,002.1524**	**0.3269**		**2,010.3248**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0166	0.6694	0.1997	2.5600e-003	0.0843	3.5300e-003	0.0879	0.0243	3.3800e-003	0.0277		275.2598	275.2598	6.7000e-003	0.0406	287.5188
Worker	0.0944	0.0570	0.7420	2.0800e-003	0.2739	1.2800e-003	0.2751	0.0726	1.1700e-003	0.0738		210.4091	210.4091	6.6900e-003	6.2700e-003	212.4450
Total	**0.1110**	**0.7264**	**0.9417**	**4.6400e-003**	**0.3582**	**4.8100e-003**	**0.3630**	**0.0969**	**4.5500e-003**	**0.1015**		**485.6689**	**485.6689**	**0.0134**	**0.0469**	**499.9638**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5732	5.3259	8.7951	0.0136		0.2465	0.2465		0.2276	0.2276		1,297.8096	1,297.8096	0.4114		1,308.0951
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5732**	**5.3259**	**8.7951**	**0.0136**		**0.2465**	**0.2465**		**0.2276**	**0.2276**		**1,297.8096**	**1,297.8096**	**0.4114**		**1,308.0951**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0341	0.0206	0.2679	7.5000e-004	0.0989	4.6000e-004	0.0994	0.0262	4.2000e-004	0.0267		75.9811	75.9811	2.4200e-003	2.2600e-003	76.7163
Total	**0.0341**	**0.0206**	**0.2679**	**7.5000e-004**	**0.0989**	**4.6000e-004**	**0.0994**	**0.0262**	**4.2000e-004**	**0.0267**		**75.9811**	**75.9811**	**2.4200e-003**	**2.2600e-003**	**76.7163**

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	0.5732	5.3259	8.7951	0.0136		0.2465	0.2465		0.2276	0.2276	0.0000	1,297.8096	1,297.8096	0.4114		1,308.0951
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5732**	**5.3259**	**8.7951**	**0.0136**		**0.2465**	**0.2465**		**0.2276**	**0.2276**	**0.0000**	**1,297.8096**	**1,297.8096**	**0.4114**		**1,308.0951**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0341	0.0206	0.2679	7.5000e-004	0.0989	4.6000e-004	0.0994	0.0262	4.2000e-004	0.0267		75.9811	75.9811	2.4200e-003	2.2600e-003	76.7163
Total	**0.0341**	**0.0206**	**0.2679**	**7.5000e-004**	**0.0989**	**4.6000e-004**	**0.0994**	**0.0262**	**4.2000e-004**	**0.0267**		**75.9811**	**75.9811**	**2.4200e-003**	**2.2600e-003**	**76.7163**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	1.0095	1.2150	8.9081	0.0149	1.6381	0.0125	1.6506	0.4367	0.0117	0.4484		1,519.0922	1,519.0922	0.1417	0.0924	1,550.1542
Unmitigated	1.0095	1.2150	8.9081	0.0149	1.6381	0.0125	1.6506	0.4367	0.0117	0.4484		1,519.0922	1,519.0922	0.1417	0.0924	1,550.1542

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	505.08	505.08	505.08	776,969	776,969
Total	505.08	505.08	505.08	776,969	776,969

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
Hotel	10.00	5.00	6.50	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.546433	0.056674	0.183423	0.128799	0.024661	0.005883	0.013276	0.009437	0.000898	0.000581	0.025768	0.000959	0.003207

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0966	0.8779	0.7375	5.2700e-003		0.0667	0.0667		0.0667	0.0667		1,053.5012	1,053.5012	0.0202	0.0193	1,059.7617
NaturalGas Unmitigated	0.0966	0.8779	0.7375	5.2700e-003		0.0667	0.0667		0.0667	0.0667		1,053.5012	1,053.5012	0.0202	0.0193	1,059.7617

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					
Hotel	8954.76	0.0966	0.8779	0.7375	5.2700e-003		0.0667	0.0667		0.0667	0.0667		1,053.5012	1,053.5012	0.0202	0.0193	1,059.7617
Total		**0.0966**	**0.8779**	**0.7375**	**5.2700e-003**		**0.0667**	**0.0667**		**0.0667**	**0.0667**		**1,053.5012**	**1,053.5012**	**0.0202**	**0.0193**	**1,059.7617**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

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					
Hotel	8.95476	0.0966	0.8779	0.7375	5.2700e-003		0.0667	0.0667		0.0667	0.0667		1,053.5012	1,053.5012	0.0202	0.0193	1,059.7617
Total		**0.0966**	**0.8779**	**0.7375**	**5.2700e-003**		**0.0667**	**0.0667**		**0.0667**	**0.0667**		**1,053.5012**	**1,053.5012**	**0.0202**	**0.0193**	**1,059.7617**

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	2.0475	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0302	0.0302	8.0000e-005		0.0322
Unmitigated	2.0475	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0302	0.0302	8.0000e-005		0.0322

AC Hotel by Marriott - Sacramento County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.2171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2900e-003	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0302	0.0302	8.0000e-005		0.0322
Total	**2.0475**	**1.3000e-004**	**0.0141**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0302**	**0.0302**	**8.0000e-005**		**0.0322**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2900e-003	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0302	0.0302	8.0000e-005		0.0322
Total	**2.0475**	**1.3000e-004**	**0.0141**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0302**	**0.0302**	**8.0000e-005**		**0.0322**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	0.20	12	103	0.74	CNG

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

UnMitigated/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
Equipment Type	lb/day										lb/day					
Generator Sets	8.2000e-004	0.0639	0.6540	2.0000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	21.0089	21.0089	7.8000e-004		21.0283
Total	**8.2000e-004**	**0.0639**	**0.6540**	**2.0000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**21.0089**	**21.0089**	**7.8000e-004**		**21.0283**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Greenhouse Gas Reduction Strategy Consistency Checklist

Greenhouse Gas Reduction Strategy Consistency Checklist

UPDATED
March 24, 2021

City of Folsom
Community Development Department
50 Natoma Street
Folsom, CA 95630
(916) 461-6202

Introduction

On August 28, 2018, the City adopted its 2035 General Plan, which establishes the framework to guide future growth and development. As part of the General Plan, the City also adopted a Greenhouse Gas Emissions Reduction Strategy (see Appendix A to the General Plan). These serve as the City's Climate Action Plan (CAP). Together they outline the policies and programs that the City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions. The purpose of this Consistency Checklist (Checklist) is to, in conjunction with the 2035 General Plan GHG Reduction Strategy and the General Plan EIR, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).

Applicability

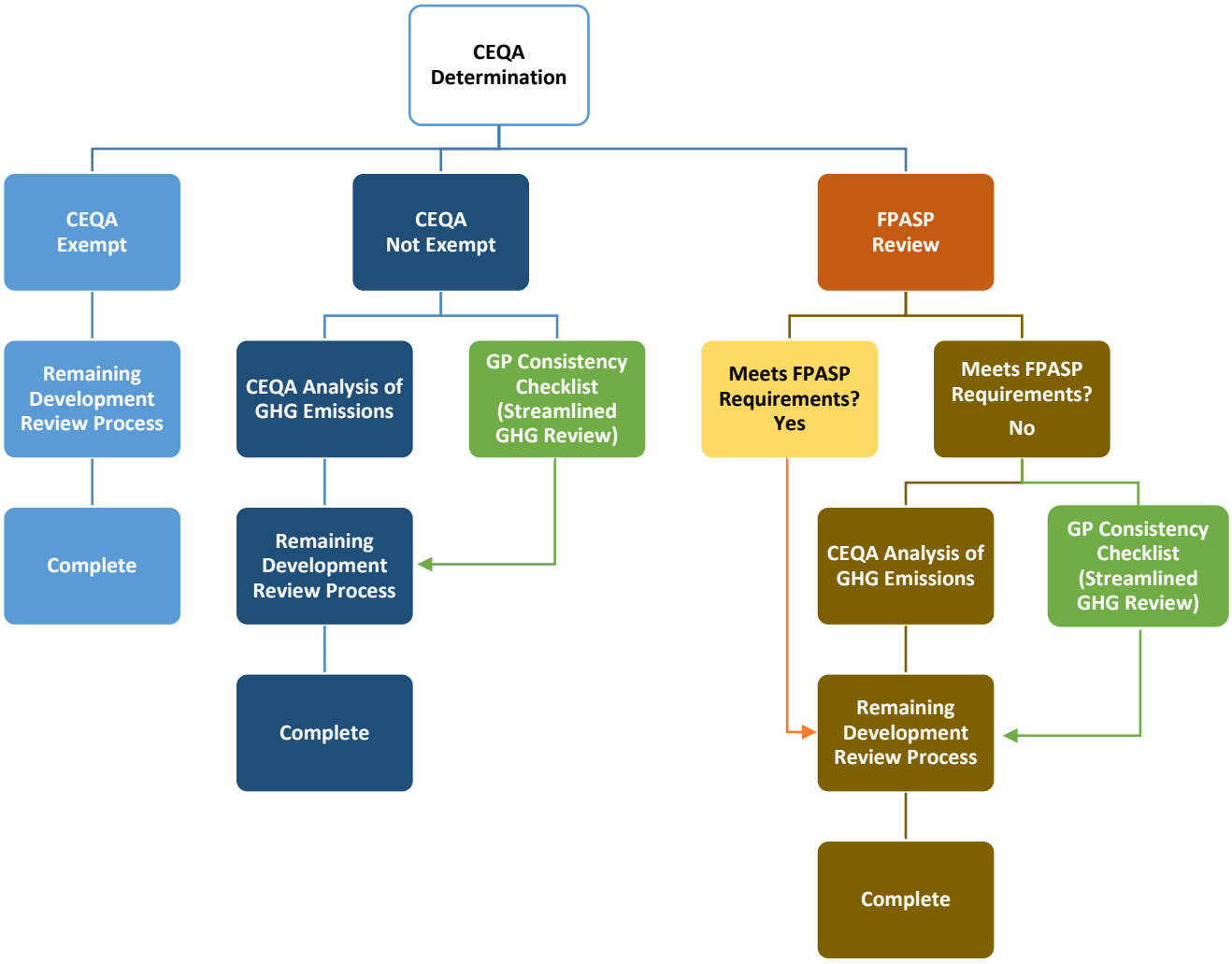
This Checklist contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the General Plan are achieved. Implementation of these measures would ensure that new development is consistent with the General Plan's assumptions for achieving the identified GHG reduction targets.

- As shown in the diagram on the following page, the Checklist is required **only** for projects subject to CEQA review.
    - ***Exception***: *Projects located in the Folsom Plan Area Specific Plan (FPASP) area and consistent with the Specific Plan requirements do not have to complete this checklist but must address the requirements and applicable GHG mitigation measures of the Specific Plan and its environmental impact report (EIR)*.
- If required, the Checklist must be included in the project submittal package. The development application is available on the City's website.
- The requirements in the Checklist must be included in the project's conditions of approval as well as in the mitigation measures in the Climate Change/GHG section of the project-specific CEQA document (i.e., EIR, Mitigated Negative Declaration, etc.).
- The applicant must provide an explanation of how the proposed project will implement these requirements to the satisfaction of the Community Development Department.

Please note that the Checklist may be updated to incorporate new GHG reduction techniques or to comply with later amendments to the General Plan or local, State, or federal law.

Streamlining Benefits

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The City's General Plan contains a strategy for the reduction of GHG emissions prepared in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project that is consistent with the General Plan as determined through the use of this Checklist may rely on the General Plan and General Plan EIR for the cumulative impacts analysis of GHG emissions (refer to diagram below). Therefore, a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the General Plan's GHG Reduction Strategy. This would also apply to projects in the FPASP that don't meet the Specific Plan requirements, but do comply with the requirements of the General Plan's GHG Reduction Strategy. However, projects that are not consistent with the Strategy must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the General Plan.



GHG Reduction Strategy Consistency Checklist - Project Application

Application Information			
Project No./Name:	AC Hotel by Marriott		
Property Address:	510 Palladio Parkway, City of Folsom, California, 95630		
Applicant Name:	Insignia Hospitality Groups, Inc.		
Contact Phone:		Contact Email:	
Was a consultant used to complete this checklist?		Yes X No ___	
Consultant Name:	Victor Ortiz	Contact Phone:	916-365-8700
Company Name:	HELIX Environmental Planning	Contact Email:	victoro@helixepi.com

Project Information	
1. What is the size of the project? (acres)	1.45 acres
2. Identify all applicable proposed land uses:	
Residential (indicate # of single-family units):	
Residential (indicate # of multi-family units):	138 rooms
Commercial (indicate total square footage):	85,473 square feet
Industrial (indicate total square footage):	
Office (indicate total square footage):	
Mixed Use (indicate total square footage/# units):	
Other (describe):	
3. Is the project located in a Transit Priority Area (within ½-mile radius of light rail station) or the East Bidwell Mixed Use Overlay?	Yes ___ No _X_
4. Provide a brief description below of the proposed project:	

The project is the construction and operation of a 85,473 square foot hotel building with 130 hotel rooms and 8 executive suites. The project would include a total of 162 parking spaces, with 28 on-site parking spaces and 134 off-site parking spaces. Indoor and outdoor amenities associated with the proposed project include a lobby and lounge area, a library, office space, a restaurant and bar, a fitness center, meeting rooms, restrooms, a kitchen, a breakfast room, a restaurant and bar, and laundry rooms. The proposed project would require a Planned Development Permit.

Part 1: Land Use Consistency

Land Use Consistency*		
Checklist Item *(Check the appropriate box and provide an explanation and supporting documentation for your answer to either A, B, C, or D).*	**Yes**	**No**
A. The proposed project is consistent with the City's 2035 General Plan land use and zoning designations.†	X	
B. If proposed project is not consistent with the 2035 General Plan land use designation, the proposed amendment or rezone will result in an increased density within a Transit Priority Area (TPA) or East Bidwell Mixed-Use Overlay area (refer to 2035 General Plan Land Use Map).(1), (4)	___	___
C. If the proposed project is not consistent with the 2035 General Plan land use and zoning designations, the project will include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations.(2), (4)		
D. The proposed project is located in and consistent with the requirements of the Folsom Plan Area Specific Plan (FPASP) area south of Highway 50.(3), (5)		

If "**Yes**," proceed to Part 2 of the Checklist and:

(1) For question B above, also complete Part 3 of the checklist.

(2) For question C above, provide estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation.

(3) For question D above, the project is covered by the requirements of the FPASP and its EIR and does NOT need to complete the Checklist.

If "**No**," in accordance with the CEQA Significance Thresholds, the project's GHG impact is significant.

(4) For questions A, B, C, and D the project must nonetheless incorporate each of the measures identified in Part 2 to mitigate cumulative GHG emissions impacts unless the City finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete Part 2 of the Checklist.

* *Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.*

† *In the event of a conflict between the 2035 General Plan and Zoning Code (Chapter 17 of the Folsom Municipal Code), to check YES the project must be consistent with the 2035 General Plan requirements. If the project is not consistent with the zoning, a rezone may be required unless the project includes affordable housing.*

Explanation:

The site is designated as Regional Commercial Center (RCC) in the Folsom 2035 General Plan. The RCC designation provides for highway-oriented, large-scale regional retail, entertainment, business, lodging, and public uses. The proposed hotel and related amenities are consistent with the existing General Plan designation.

The zoning designation of the site is General Commercial, Planned Development District (C-3, PD). The purpose of the C-3 PD is to designate areas appropriate for heavy commercial activities. While all types of commercial activities are permitted, the C-3 zone is intended for the highest-intensity commercial activities, which include heavy auto and truck traffic. The C-3 zone should be located on major arteries and thoroughfares. Hotels are identified as a permitted land use within the Folsom Municipal Code for the C-3 PD zoning district.

The Planned Development District (PD) component of the zoning designation requires a Planned Development Permit Review (PD Permit) entitlement for design review purposes (Zoning Code 17.38.050). Preliminary design plans show that the five-story hotel building would be approximately 66 feet in height, (with towers extending up to 73 feet in height) whereas the Palladio at Broadstone Development Standards indicate that the maximum height for major buildings is three stories and 60 feet in height. A PD Permit modification would be required to modify the Development Standards to accommodate the building stories and building height. The hotel appears to meet required building setbacks based on estimated distance from the property lines. With a PD Permit, the project would be deemed consistent with the existing zoning of the project site.

Part 2: GHG Reduction Measures Consistency

The second part of the checklist evaluates a project's consistency with the applicable policies and programs of the General Plan. If "Not Applicable" (N/A) is checked, please explain below.

GHG Reduction Measures - Consistency Checklist				
Checklist Item *(Check the appropriate box and provide an explanation and supporting documentation for your answer. Only one action for each GHG Measure is required)*	**GP GHG Measure**	**Yes**	**No**	**N/A**
BUILDING ENERGY SECTOR				
Exceeds Title 24: The project will exceed the requirements of the California Building Energy Efficiency Standards (Title 24, Part 6) by 15% or more; OR	E-1	X	___	___
CALGreen: The project will comply with Tier 1 or Tier 2 California Green Building Standards Code (CALGreen) (*Residential and non-residential projects*); OR	E-1			
LEED: The project is registered with the USGBC and is pursuing LEED Silver certification or greater (*Non-residential projects only*); OR	E-1			
Zero Net Energy: The project will be Zero Net Energy (ZNE) and will include on-site renewable energy as listed in California Green Building Standards Code (CALGreen) in Appendix A4 (Section A4.203).	E-1			
Water Heater Replacement: One of the following types of water heaters will be installed (*Existing buildings only*): • Tankless water heater • Electric water heater • Ground source heat pump • Solar thermal water heater • Heat pump water heater	E-2	___	___	___
Energy Audit: An energy audit be performed prior to the issuance of the building permit and the applicant agrees as a condition of approval to incorporate all cost-effective energy improvements into the project based on the recommendations of the energy audit. (*Existing buildings only*)	E-3	___	___	___
Renewable Energy for Building Retrofits: The retrofit or expansion for the project will add on-site installation of solar panels/photovoltaics, the use of geothermal heating and cooling, or the use of wind power (*Existing buildings only*).	E-4	___	___	___

GHG Reduction Measures - Consistency Checklist				
Checklist Item *(Check the appropriate box and provide an explanation and supporting documentation for your answer. Only one action for each GHG Measure is required)*	**GP GHG Measure**	**Yes**	**No**	**N/A**
BUILDING ENERGY SECTOR				

Explanation:

The project would meet one of the four Building Energy Sector requirements of the GHG Reduction Measure Consistency Checklist with Mitigation Measure GHG-01.

GHG Reduction Measures - Consistency Checklist				
Checklist Item *(Check the appropriate box and provide an explanation and supporting documentation for your answer. Only one action for each GHG Measure is required)*	**GP GHG Measure**	**Yes**	**No**	**N/A**
TRANSPORTATION SECTOR				
Project Location and Density: Project is located within a Transit Priority Area (1/2-mile of a light rail station) or within the East Bidwell Mixed-Use Overlay and has a mix of uses (i.e., residential, office, commercial, etc.) with a minimum density of 20 units per acre (du/ac) or a Floor Area Ratio (FAR) of 0.75; OR	T-1	___	___	___
Mix of Uses: The project is a mixed-use building with two or more uses (i.e., residential, commercial, office, etc.) or if the site is 5 acres or larger there are two or more uses on the site connected by protected pedestrian paths (e.g., sidewalks, elevated walkways) excluding driveways.	T-1	X		
Complete Streets (*New Development only*): For projects that include the construction of new streets, the project will design and build complete streets (i.e., streets with sidewalk, planter strip, bike lane and vehicle lane(s)) as set forth in Section 11 of the City's Design and Procedures Manual and Improvement Standards - Standard Construction Specifications and Details.	T-2	___	___	___

<table>
<tr><th colspan="5">GHG Reduction Measures - Consistency Checklist</th></tr>
<tr><th>Checklist Item
(Check the appropriate box and provide an explanation and supporting documentation for your answer. Only one action for each GHG Measure is required)</th><th>GP GHG Measure</th><th>Yes</th><th>No</th><th>N/A</th></tr>
<tr><td colspan="5">TRANSPORTATION SECTOR</td></tr>
<tr><td>Bicycle Parking: Project provides 5% more bicycle parking spaces than required in the City's Municipal Code (Section 17.57.090); OR</td><td>T-3</td><td rowspan="2">X</td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>Shower Facilities (Non-residential only): Project would either meet the requirements of Section 17.57.050(C) of the Folsom Municipal Code or will install changing/shower facilities in accordance with the voluntary measures under Appendix A5 of the California Green Building Standards Code (CALGreen) as shown in the table below:
<table>
<tr><th>Number of Tenant Occupants (Employees)</th><th>Shower/Changing Facilities Required</th><th>Personal Effects Lockers Required (12" x 15" x 72")</th></tr>
<tr><td>0-10</td><td>0</td><td>0</td></tr>
<tr><td>11-50</td><td>1</td><td>2</td></tr>
<tr><td>51-100</td><td>3</td><td>3</td></tr>
<tr><td>101-200</td><td>5</td><td>4</td></tr>
<tr><td>201 and over</td><td>1 shower stall plus 1 additional stall for each 200 additional tenant-occupants</td><td>1 locker plus 1 locker for each additional 50 additional tenant occupants</td></tr>
</table>
</td><td>T-3</td></tr>
<tr><td>Reduced Parking Capacity (Non-Residential): For new non-residential projects, the project will reduce total parking spaces by 5% and will comply with the requirements of Section 17.57.050(C) of the Folsom Municipal Code OR provide one or more of the following:
Shared parking agreement with adjacent property owner.
Use of street parking or compact spaces on site plan.
Program to encourage employees to carpool, ride share or use alternate forms of transportation (e.g., employee bus pass program).</td><td>T-5</td><td>___</td><td>___</td><td>___</td></tr>
</table>

<table>
<tr><th colspan="5">GHG Reduction Measures - Consistency Checklist</th></tr>
<tr><th>Checklist Item
(Check the appropriate box and provide an explanation and supporting documentation for your answer. Only one action for each GHG Measure is required)</th><th>GP GHG Measure</th><th>Yes</th><th>No</th><th>N/A</th></tr>
<tr><td colspan="5">TRANSPORTATION SECTOR</td></tr>
<tr><td>High-Performance Diesel (Construction only): Use high-performance diesel (also known as Diesel-HPR or Reg-9000/RHD) for construction equipment.</td><td>T-6</td><td>X</td><td>___</td><td>___</td></tr>
<tr><td>Electric Vehicle Charging (Residential): For multifamily projects with 17 or more dwelling units, provide electric vehicle charging in 5% of total parking spaces; OR</td><td>T-8</td><td rowspan="3">X

___</td><td rowspan="3">___</td><td rowspan="3">___</td></tr>
<tr><td>Electric Vehicle Charging (Residential): For one- and two-family dwellings and townhouses with attached private garages, install at least one (1) electric vehicle charger which includes a dedicated 208/240-volt branch circuit that has an overcurrent protective device rated at 40 amperes minimum per dwelling unit; OR</td><td>T-8</td></tr>
<tr><td>Electric Vehicle Charging (Non-Residential): Project will install electric vehicle charging stations based on the total number of parking spaces and shown in the table below:

<table><tr><th>Total Parking Spaces</th><th>Number of Required Spaces</th></tr><tr><td>0-9</td><td>0</td></tr><tr><td>10-25</td><td>2</td></tr><tr><td>26-50</td><td>3</td></tr><tr><td>51-75</td><td>5</td></tr><tr><td>76-100</td><td>7</td></tr><tr><td>101-150</td><td>10</td></tr><tr><td>151-200</td><td>14</td></tr><tr><td>201 and over</td><td>8% of total</td></tr></table></td><td>T-8</td></tr>
</table>

GHG Reduction Measures - Consistency Checklist				
Checklist Item *(Check the appropriate box and provide an explanation and supporting documentation for your answer. Only one action for each GHG Measure is required)*	**GP GHG Measure**	**Yes**	**No**	**N/A**
SOLID WASTE				
Enhanced Construction Waste Diversion: Project diverts to recycle or salvage at least 65% of nonhazardous construction and demolition waste generated at the project site in accordance with either Appendix A4 (Residential) or Appendix A5 (Non-Residential) of the California Green Building Standards Code. This may be done by using a waste management company that can provide verifiable documentation that the waste diversion complies with this requirement.	SW-1	X	___	___
WATER AND WASTE WATER				
Water Efficiency: For new residential and non-residential projects, the project will comply with all applicable indoor and outdoor water efficiency and conservation measures required under CALGreen Tier 1, as outlined in the California Green Building Standards Code.	W-1	X	___	___
Commercial Water Audit: For existing commercial and industrial projects that require substantial addition, alteration, and expansion to existing facilities, the project must comply with a water audit. The water audit must be performed prior to issuance of a building permit. The applicant agrees, as a condition of approval, to incorporate all cost-effective water efficiency improvements into the project design, per recommendations in the water audit.	W-2	___	___	___
Large Landscape Irrigation Audit: For existing multi-family projects or commercial and industrial projects on lots 5 acres or larger, the project must comply with a water audit. The water audit must be performed prior to issuance of a building permit. The applicant agrees, as a condition of approval, to incorporate all cost-effective water efficiency improvements into the project design, per recommendations in the water audit.	W-2	___	___	___

Part 3: Project Conformance Evaluation (*if applicable*)

The third part of the consistency review only applies if B is checked YES in Part 1. The purpose of this is to determine whether a project that is located in any of the City's Transit Priority Areas (i.e., 1/2-mile of the Historic Folsom Station TPA, Glenn Station TPA, or Iron Point Station TPA) or the East Bidwell Mixed Use Overlay area which includes a land use plan and/or zoning designation amendment is nevertheless consistent with the General Plan's GHG Reduction Strategy because it would implement those policies and programs. In general, a project that would result in a reduction in density inside a TPA or mixed-use overlay area[‡] would not be consistent with the GHG reduction policies nor could it take advantage of CEQA streamlining benefits available through Senate Bill 375 (2009). The following questions must each be answered in the affirmative and fully explained.

1. Would the proposed project implement the General Plan's Transit Oriented Development (TOD) or Mixed-Use District policies in an identified Transit Priority Area (TPA) or Mixed Use Overlay area that will result in an increase in the capacity for transit-supportive residential and/or employment densities?

Considerations for this question:

a) Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA or Mixed-Use Overlay area (Minimum of 20 du/acre)? **Yes ___ No ___ N/A ___**

b) Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA or Mixed-Use Zone (Minimum of 0.75 FAR)? **Yes ___ No ___ N/A ___**

c) If the project is mixed-use, is 75% or the total building square footage for residential use? **Yes ___ No ___ N/A ___**

If N/A, checked please explain: _____

_____

_____

[‡] *Project located in the East Bidwell Mixed-Use Overlay area would not qualify for CEQA streamlining under SB 375 unless the project was located near a high frequency bus stop (i.e., a stop with 15-minute bus headways during peak commute times. Currently none of the City's bus stops are high frequency bus stops).*

2. Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas or Mixed-Use Overlay areas to increase the use of transit?

Considerations for this question:

a) Does the proposed project support/incorporate identified transit routes and stops/stations? **Yes ___ No ___ N/A ___**

Explain: _____

_____

_____

b) Does the project include transit priority measures consistent with General Plan Goal 3.1 and related policies? **Yes ___ No ___ N/A ___**

Explain: _____

_____

_____

3. Would the proposed project implement pedestrian improvements in Transit Priority Areas or Mixed-Use Overlay areas to increase walking opportunities?

Considerations for this question:

a) Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, parks, shopping centers, and libraries)? **Yes ___ No ___ N/A ___**

Explain: _____

_____

_____

b) Does the proposed project urban design include features for walkability to promote a transit supportive environment? **Yes ___ No ___ N/A ___**

Explain: _____

_____

_____

c) Does the project fill gaps in the City's existing sidewalk network?
Yes ___ No ___ N/A ___

Explain: _____

_____

_____

4. Would the proposed project implement the City of Folsom's Bicycle Master Plan to increase bicycling opportunities?

Considerations for this question:

a) Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan? **Yes ___ No ___ N/A ___**

Explain: _____

_____

_____

b) Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users (i.e., includes separated sidewalks, bike paths, and vehicle travel lanes)? **Yes ___ No ___ N/A ___**

Explain: _____

_____

_____

5. Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Considerations for this question:

a) Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA or Mixed-Use Overlay area?
Yes ___ No ___ N/A ___

Explain: _____

_____

_____

b) Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA or Mixed-Use Overlay area?
Yes ___ No ___ N/A ___

Explain: _____

_____

_____

c) Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking[§], reduced parking, paid or time-limited parking, etc.?
Yes ___ No ___ N/A ___

Explain: _____

_____

_____

[§] *"Unbundled parking" is a strategy in which parking spaces are rented or sold separately, rather than automatically included with the rent or purchase price of a residential or commercial unit.*

Appendix A - City GHG Reduction Measures and Implementing Programs**

E-1 Improve Building Energy Efficiency in New Development*

- PFS-25 Zero Net Energy Development: Adopt an ordinance to require ZNE for all new residential construction by 2020 and commercial construction by 2030, in coordination with State actions to phase in ZNE requirements through future triennial building code updates.
    - Applicable to: New Development
- LU-6 Adopt Green Building: Encourage new residential and non-residential construction projects to adopt and incorporate green building features included in the CALGreen Tier 1 checklist in project designs; and, encourage projects to seek LEED rating and certification that would meet equivalent CALGreen Tier 1 standards or better. Consider future amendments to City code to adopt CALGreen Tier 1 requirements consistent with State building code. For projects subject to CEQA seeking to streamline GHG analysis consistent with the General Plan, CALGreen Tier 1 compliance would be required.
    - Applicable to: New Development

E-2 Water Heater Replacement in Existing Residential Development

- PFS-23 High-Efficiency or Alternatively-Powered Water Heater Replacement Program: Provide educational material and information on the City's website, as well as through the permit and building department, on the various high-efficiency and alternatively-powered water heat replacement options available to current homeowners considering water heater replacement; develop appropriate financial incentives, working with energy utilities or other partners; and, streamline the permitting process. Replacement water heaters could include high-efficiency natural gas (i.e., tankless), or other alternatively-powered water heating systems that reduce or eliminate natural gas usage such as solar water heating systems, tankless or storage electric water heaters, and electric heat pump systems.
    - Applicable to: Existing Development

E-3 Improve Building Energy Efficiency in Existing Residential Development

- PFS-24 Energy Efficiency and Renewable Energy Retrofits and Programs: Strive to increase energy efficiency and renewable energy use in existing buildings through participation in available programs. Actions include:

** GHG Reduction Strategy measures are from Appendix A of the 2035 General Plan adopted August 28, 2018.

- Establish a dedicated City program with a clear intent to provide support and promote available green building and energy retrofit programs for existing buildings.
- Incentivize solar installation on all existing buildings that undergo major remodels or renovations, and provide permit streamlining for solar retrofit projects.
- Provide rebates or incentives to existing SMUD customers for enrolling in the existing Greenergy program.
- Provide education to property owners on low-interest financing and/or assist property owners in purchasing solar photovoltaics through low- interest loans or property tax assessments.
- Continue to work with SMUD and other private sector funding sources to increase solar leases or power purchase agreements (PPAs).
    - Applicable to: Existing Development

E-4 Increase Use of Renewable Energy in Existing Development

- PFS-24 Energy Efficiency and Renewable Energy Retrofits and Programs: Strive to increase energy efficiency and renewable energy use in existing buildings through participation in available programs. Actions include:
    - Establish a dedicated City program with a clear intent to provide support and promote available green building and energy retrofit programs for existing buildings.
    - Incentivize solar installation on all existing buildings that undergo major remodels or renovations, and provide permit streamlining for solar retrofit projects.
    - Provide rebates or incentives to existing SMUD customers for enrolling in the existing Greenergy program.
    - Provide education to property owners on low-interest financing and/or assist property owners in purchasing solar photovoltaics through low- interest loans or property tax assessments.
    - Continue to work with SMUD and other private sector funding sources to increase solar leases or power purchase agreements (PPAs).
        - Applicable to: Existing Development

T-1 Reduce VMT through Mixed and High-Density Land Use*

- LU-1. Update the Zoning Ordinance: Develop a priority list for how sections of the Folsom Zoning Ordinance and applicable guidelines will be updated consistent with the General Plan. The City shall review and update the Folsom Zoning Ordinance and applicable guidelines, consistent with the policies and diagrams of the General Plan. The update shall include developing appropriate standards to encourage mixed use within the East Bidwell Overlay area and transit-oriented development around light rail

stations, including restrictions on automobile-oriented uses within one-quarter mile of light rail stations. The City shall review and update the Historic District Design and Development Guidelines.

  - Applicable to: New and Existing Development

- LU-4. Property Owner Outreach on Overlay Designations: Reach out to property owners within the East Bidwell Mixed Use Overlay and Transit-Oriented Development Overlay areas to explain the options available to property owners and developers in this area, and provide technical assistance, as appropriate, to facilitate development within these areas.

  - Applicable to: New and Existing Development

T-2 Improve Streets and Intersections for Multi-Modal Use and Access*

- M-8. Bicycle and Pedestrian Improvements: Identify regional, State, and Federal funding sources to support bicycle and pedestrian facilities and programs to improve roadways and intersections by 2035. Actions include:

  - Require bicycle and pedestrian improvements as conditions of approval for new development on roadways and intersections serving the project. Improvements may include, but are not limited to: on-street bike lanes, traffic calming improvements such as marked crosswalks, raised intersections, median islands, tight corner radii, roundabouts, on-street parking, planter strips with street trees, chicanes, chokers, any other improvement that focuses on reducing traffic speeds and increasing bicycle and pedestrian safety. For projects subject to CEQA seeking to streamline GHG analysis consistent with the General Plan, incorporation of applicable bicycle and pedestrian improvements into project designs or conditions of approval would be required.
  - Based on the most recent citywide inventory of roadways and pedestrian/bicycle facilities, identify areas of greatest need, to focus improvements on first. Areas to prioritize include roadways or intersections with a lack of safety features, street where disruption in sidewalks or bicycle lanes occurs, areas of highest vehicle traffic near commercial centers and transit facilities, where increased use of pedestrian/bicycle facilities would be most used.
    - Applicable to: Existing and New Development

T-3 Adopt Citywide TDM Program

- M-1. Transportation Demand Management: Adopt a citywide Transportation Demand Management (TDM) program that encourages residents to reduce the amount of trips taken with single-occupancy vehicles. The program shall be designed to achieve an overall 15 percent vehicle mile traveled (VMT) reduction over 2014 levels and a 20 percent reduction in City-employee commute VMT. The City shall coordinate with

employers to develop a menu of incentives and encourage participation in TDM programs.

- Applicable to: Existing and New Development

T-5 Reduce Minimum Parking Standards*

- M-11. Parking Standards Review and update its parking standards as necessary to reduce the amount of land devoted to parking and encourage shared parking arrangements, particularly in mixed-use and transit-oriented developments.
  - Applicable to: Existing and New Development

T-6 Require the Use of High-Performance Renewable Diesel in Construction Equipment*

- PFS-26 Renewable Diesel: Revise the City of Folsom's Standard Construction Specifications to require that all construction contractors use high-performance renewable diesel for both private and City construction. Phase in targets such that high-performance renewable diesel would comprise 50 percent of construction equipment diesel usage for projects covered under the specifications through 2030, and 100 percent of construction equipment diesel usage in projects covered under the specifications by 2035.

  For projects subject to CEQA seeking to streamline GHG analysis consistent with the General Plan, the use of high-performance renewable diesel would be required consistent with the above targets.
  - Applicable to: Existing and New Development

T-8 Install Electric Vehicle Charging Stations*

- M-3. Electric Vehicle Charge Stations in Public Places: Develop and implement a citywide strategy to install electric vehicle charging stations in public places where people shop, dine, recreate, and gather.
  - Applicable to: Existing and New Development

SW-1 Increase Solid Waste Diversions

- This measure is addressed though Program LU-6 (Adopt Green Building) as both LEED and CALGreen Tier 1 require solid waste diversion to gain certification.
  - Applicable to: Existing and New Development

W-1 Increase Water Efficiency in New Residential Development*

- PFS-27 Reduce Water Consumption in New Development: Encourage water efficiency measures for new residential construction to reduce indoor and outdoor water use. Actions include: promote the use of higher efficiency measures, including: use of low-water irrigation systems, and installation of water- efficient appliances and plumbing fixtures. Measures and targets can be borrowed from the latest version of the Guide to the California Green Building Standards Code (International Code Council)

  For projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan, compliance with CALGreen Tier 1 Water Efficiency and Conservation measures would be required.

  - Applicable to: New Development
  - Time Frame: Ongoing

W-2 Reduce Outdoor Water Use in New Residential Development*

- PFS-27 Reduce Water Consumption in New Development: Encourage water efficiency measures for new residential construction to reduce indoor and outdoor water use. Actions include: promote the use of higher efficiency measures, including: use of low-water irrigation systems, and installation of water- efficient appliances and plumbing fixtures. Measures and targets can be borrowed from the latest version of the Guide to the California Green Building Standards Code (International Code Council)

  For projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan, compliance with CALGreen Tier 1 Water Efficiency and Conservation measures would be required.

  - Applicable to: New Development
  - Time Frame: Ongoing

**Applies to projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan.*