

FINAL ENVIRONMENTAL IMPACT REPORT

FOR THE

LEBARON RANCH
(SCH # 2023070657)

JUNE 2025

Prepared for:

City of Stockton
345 N. El Dorado Street
Stockton, CA 95202

Prepared by:

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D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm

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FINAL EIR

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INTRODUCTION

The City of Stockton, as the lead agency, determined that the proposed project, LeBaron Ranch, is a "project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report (EIR) prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Project-level EIR is described in State CEQA Guidelines § 15161 as: "The most common type of EIR (which) examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation. The project-level analysis considers the broad environmental effects of the proposed Project.

PROJECT DESCRIPTION

The following provides a brief summary and overview of the Project. Chapter 2.0 of this EIR includes a detailed description of the Project, including maps and graphics. The reader is referred to Chapter 2.0 for a more complete and thorough description of the components of the Project.

The LeBaron Ranch Project site (proposed Project site) is located in the northern portion of the City of Stockton Metropolitan Area, within the unincorporated area of San Joaquin County. The Project site is adjacent to the City of Stockton's northern city limits, within the City of Stockton (City) Sphere of Influence (SOI) (as defined in the Envision Stockton 2040 General Plan), and within the City of Stockton Urban Services Boundary.

The proposed Project is primarily a residential development anticipated to provide up to 1,411 units (assuming school site is developed with single-family residential units). Total parkland and open space areas total 30.7 acres. Part of the open space acreage will come from a series of streets with an enhanced right of way to accommodate a pedestrian "wellness walk." Other uses to support and compliment the proposed residential development include underground wet and dry utility infrastructure, roadways, curb/gutters/sidewalks, bicycle/pedestrian facilities, street lighting, and street signage.

The proposed Project includes a vesting tentative map that would subdivide the Development Area consistent with the proposed land uses. The Development Area would have 1,217 single family residential units with lot sizes that would range from 3,375 to 6,000 sf. Additionally, the Development Area would include 194 high density residential units on 9.5 acres to the west of the proposed single family residential area, for a total residential unit count of 1,411 units.

The proposed Project establishes a site for a 12.0-acre K-8 school to be developed by Lodi Unified School District (LUSD). The development of a K-8 school at this site is the discretionary decision of the LUSD, and while the proposed Project has planned for a school at this location, it will be determined by LUSD at a later date through their decision-making process. If the LUSD decides to not pursue building a school at this site, then the site would be developed with 79 single family residential units. Construction of homes in this location would increase the number of units by 79 units when compared to the proposed Project with the school site. The total combined units would increase from 1,332 under the proposed Project to 1,411 units under this variation (i.e., no school).

The proposed Project would require a City of Stockton General Plan Amendment to the Land Use Element to change land uses on the Project site. Changes to the General Plan Land Use Map are largely a reorganization of the precise locations for each land use within the boundary of the Project site as opposed to land use changes. Additionally, the proposed Project includes a request for pre-zoning of the Development Area and Non-development Area, as described below. The pre-zoning would go into effect upon annexation into the City of Stockton. The pre-zoning request is for an RL District, RM District, RH District and PF District.

The principal purpose of the proposed Project is the annexation of the Project site into the City of Stockton, and approval and subsequent development of the Development Area for residential and park uses.

ALTERNATIVES TO THE PROJECT

The CEQA Guidelines require an EIR to describe a reasonable range of alternatives to the Project or to the location of the Project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the proposed Project. Three alternatives to the proposed Project were developed based on input from City staff and the technical analysis performed to identify the environmental effects of the proposed Project. The alternatives analyzed in this EIR include the following three alternatives in addition to the proposed Project.

- **No Project (No Build) Alternative:** Under this alternative, development of the Project site would not occur, and the Project site would remain in its current existing condition.
- **Reduced Density Alternative:** Under the Reduced Density Alternative, the proposed Project would be developed with the same types of residential, open space, and parks and recreational facility uses as described in the Project Description, but the residential unit count would decrease by 25 percent, the amount of proposed, and the on-site open space would decrease by 25 percent. The school site would not be provided under this alternative, and the high-density residential portion of the Project would be removed.
- **Agriculture Protection Alternative:** Under this alternative, the proposed Project would be developed in such a way to protect some of the on-site Important Farmland by reducing the overall footprint of the developed areas.

Alternatives are described in detail in Chapter 5.0 of the Draft EIR. Table ES-1 provides a comparison of the alternatives using a qualitative matrix that compares each alternative relative to the other Project alternatives.

TABLE ES-1: COMPARISON SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

<i>ENVIRONMENTAL ISSUE</i>	<i>NO PROJECT (NO BUILD) ALTERNATIVE</i>	<i>REDUCED DENSITY ALTERNATIVE</i>	<i>AGRICULTURE PROTECTION ALTERNATIVE</i>
Aesthetics and Visual Resources	Less (Best)	Slightly Less (3rd Best)	Less (2nd Best)
Agricultural Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Air Quality	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Biological Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Cultural and Tribal Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Geology and Soils	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Greenhouse Gases, Climate Change and Energy	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Hazards and Hazardous Materials	Less (Best)	Equal (2nd Best)	Equal (2nd Best)
Hydrology and Water Quality	Less (Best)	Slightly Less (3rd Best)	Less (2nd Best)
Land Use and Population	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Noise	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Public Services and Recreation	Less (Best)	Equal (2nd Best)	Equal (3rd Best)
Transportation and Circulation	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Utilities	Less (Best)	Less (2nd Best)	Equal (3rd Best)

GREATER = GREATER IMPACT THAN THAT OF THE PROPOSED PROJECT

LESS = LESS IMPACT THAN THAT OF THE PROPOSED PROJECT

EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE PROPOSED PROJECT

A comparative analysis of the Project and each of the Project alternatives is provided in Table ES-1. As shown in the table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project (No Build) Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. Therefore, the Reduced Density Alternative and Agriculture Protection Alternative both rank higher than the proposed Project. The Reduced Density Alternative would have equal impacts in five (5) areas, slightly less impacts in five (5) areas, and less impacts in nine (9) areas. The Agriculture Protection Alternative would have equal impacts in nine (9) areas and less impacts in five (5) areas. Therefore, the Reduced Density Alternative would be the next environmentally superior alternative. It is noted that neither the Agriculture Protection Alternative nor the Reduced Density Alternative fully meet all the Project objectives. See Section 5.4 below for a comparative evaluation of the objectives for each alternative.

COMMENTS RECEIVED

This Draft EIR addresses environmental impacts associated with the proposed Project that are known to the City of Stockton, were raised during the NOP process, or raised during preparation of the Draft EIR. This Draft EIR discusses potentially significant impacts associated with aesthetics and visual resources, agricultural resources, air quality, biological resources, cultural and tribal resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, population, and housing, noise, public services and recreation, transportation and circulation, and utilities.

The City of Stockton received five (5) written comment letters on the NOP for the proposed Project. A copy of the letters is provided in Appendix A of this Draft EIR. The City also held a public

scoping meeting on August 22, 2023. No written or verbal comments were provided at that scoping meeting. The commenting agency/citizen is provided below.

- California Department of Conservation;
- California Department of Fish and Wildlife;
- Central Valley Regional Water Quality Control Board;
- Melvin Corren;
- Native American Heritage Commission;
- Pacific Gas and Electric Company;
- San Joaquin Council of Government, Inc.; and
- San Joaquin County.

This Final Environmental Impact Report (Final EIR) was prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (Section 15132). The City of Stockton (City) is the lead agency for the environmental review of the LeBaron Ranch Project (Project) and has the principal responsibility for approving the Project. This Final EIR assesses the expected environmental impacts resulting from approval of the Project and associated impacts from subsequent development and operation of the Project, as well as responds to comments received on the Draft Environmental Impact Report (Draft EIR).

1.1 PURPOSE AND INTENDED USES OF THE EIR

CEQA REQUIREMENTS FOR A FINAL EIR

This Final EIR for the Project has been prepared in accordance with the State CEQA Guidelines. State CEQA Guidelines Section 15132 requires that a Final EIR consist of the following:

- the Draft EIR or a revision of the draft;
- comments and recommendations received on the Draft EIR, either verbatim or in summary;
- a list of persons, organizations, and public agencies commenting on the Draft EIR;
- the responses of the lead agency to significant environmental concerns raised in the review and consultation process; and
- any other information added by the lead agency.

In accordance with State CEQA Guidelines Section 15132(a), the Draft EIR is incorporated by reference into this Final EIR.

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the Project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

PURPOSE AND USE

The City, as the lead agency, has prepared this Final EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from approval, construction, and operation of the Project. Responsible and trustee agencies that may use the EIR are identified in Chapters 1.0 and 2.0 of the Draft EIR.

The environmental review process enables interested parties to evaluate the Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the Project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead

agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used as the primary environmental document to evaluate all aspects of construction and operation of the Project. The details and operational characteristics of the Project are identified in Chapter 2.0, Project Description, of the Draft EIR (August 2024).

1.2 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION AND INITIAL STUDY

The City of Stockton circulated a Notice of Preparation (NOP) of an EIR for the proposed Project on July 31, 2023, to the State Clearinghouse, State Responsible Agencies, State Trustee Agencies, Other Public Agencies, Organizations, and Interested Persons. A public scoping meeting was held via Microsoft Teams on August 22, 2023 to present the Project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. There were seven participants in attendance at the scoping meeting. This included the City staff, city consultants, and applicant team. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments received on the NOP by interested parties are presented in Appendix A of the Draft EIR.

NOTICE OF AVAILABILITY AND DRAFT EIR

The City published a public Notice of Availability (NOA) for the Draft EIR on August 16, 2024 inviting comment from the general public, agencies, organizations, and other interested parties. The NOA was filed with the State Clearinghouse (SCH # 2023070657) and the County Clerk, and was published in a local newspaper pursuant to the public noticing requirements of CEQA. The 45-day public review period for the Draft EIR began on August 16, 2024 and ended on September 30, 2024 at 5:00 p.m.

The Draft EIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less-than-significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in the Draft EIR.

RESPONSE TO COMMENTS/FINAL EIR

The City received six comment letters regarding the Draft EIR from public agencies and a private group. These comment letters on the Draft EIR are identified in Table 2.0-1, and are found in Chapter 2.0 of this Final EIR.

In accordance with CEQA Guidelines Section 15088, this Final EIR responds to the written comments received on the Draft EIR, as required by CEQA. This Final EIR also contains minor edits to the Draft EIR, which are included in Chapter 3.0, Revisions. This document, as well as the Draft EIR as amended herein, constitute the Final EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The Stockton Planning Commission and City Council will review and consider the Final EIR. If the City Council finds that the Final EIR is "adequate and complete," the Council may certify the Final EIR in accordance with CEQA and City environmental review procedures and codes. The rule of adequacy generally holds that an EIR can be certified if:

- 1) The EIR shows a good faith effort at full disclosure of environmental information; and
- 2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project which intelligently take account of environmental consequences.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or reject the Project. A decision to approve the Project, for which this EIR identifies significant environmental effects, must be accompanied by written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. A Mitigation Monitoring and Reporting Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring and Reporting Program has been designed to ensure that these measures are carried out during Project implementation, in a manner that is consistent with the EIR.

1.3 ORGANIZATION OF THE FINAL EIR

This Final EIR has been prepared consistent with Section 15132 of the State CEQA Guidelines, which identifies the content requirements for Final EIRs. This Final EIR is organized in the following manner:

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, agency, summarizes the process associated with preparation and certification of an EIR, and identifies the content requirements and organization of the Final EIR.

CHAPTER 2.0 – COMMENTS ON THE DRAFT EIR AND RESPONSES

Chapter 2.0 provides a list of commenters, copies of written and electronic comments made on the Draft EIR (coded for reference), and responses to those written comments.

CHAPTER 3.0 – REVISIONS

Chapter 3.0 consists of minor revisions to the Draft EIR in response to comments received on the Draft EIR.

CHAPTER 4.0 – FINAL MMRP

Chapter 4.0 consists of a Mitigation Monitoring and Reporting Program (MMRP). The MMRP is presented in a tabular format that presents the impacts, mitigation measure, and responsibility, timing, and verification of monitoring.

2.1 INTRODUCTION

No new significant environmental impacts or issues, beyond those already covered in the Draft EIR for the LeBaron Ranch Project (Project), were raised during the comment period. Responses to comments received during the comment period do not involve any new significant impacts or add “significant new information” that would require recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5.

CEQA Guidelines Section 15088.5 states that: *New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement.*

Sections 2.0 and 3.0 of this Final EIR include information that has been added to the EIR since the close of the public review period in the form of responses to comments and revisions.

2.2 LIST OF COMMENTERS

Table 2.0-1 lists the comments on the Draft EIR that were submitted to the City of Stockton (City) during the 45-day public review period for the Draft EIR. The assigned comment letter or number, letter date, letter author, and affiliation, if presented in the comment letter or if representing a public agency, are also listed. Letters received are coded with letters (A, B, etc.).

TABLE 2.0-1 LIST OF COMMENTERS ON DRAFT EIR

RESPONSE LETTER	INDIVIDUAL OR SIGNATORY	AFFILIATION	DATE
A	Morgan Kilgour	California Department of Fish and Wildlife	9-26-24
B	Jamie Silva	Central Valley Flood Protection Board	9-25-24
C	Aaron Gooderham	San Joaquin County Environmental Health Department	9-19-24
D	J.D. Hightower	San Joaquin LAFCO	9-27-24
E	Mark Montelongo	San Joaquin Valley Air Pollution Control District	9-25-24
F	Margo Praus, Eric Parfrey, Mary Elizabeth	Sierra Club, Delta-Sierra Group	9-30-24

2.3 COMMENTS AND RESPONSES

REQUIREMENTS FOR RESPONDING TO COMMENTS ON A DRAFT EIR

CEQA Guidelines Section 15088 requires that lead agencies evaluate and respond to all comments on the Draft EIR that regard an environmental issue. The written response must address the significant environmental issue raised and provide a detailed response, especially when specific comments or suggestions (e.g., additional mitigation measures) are not accepted. In addition, the written response must be a good faith and reasoned analysis. However, lead agencies need only to respond to significant environmental issues associated with the project and do not need to provide all the information requested

by the commenter, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204).

CEQA Guidelines Section 15204 recommends that commenters provide detailed comments that focus on the sufficiency of the Draft EIR in identifying and analyzing the possible environmental impacts of the project and ways to avoid or mitigate the significant effects of the project, and that commenters provide evidence supporting their comments. Pursuant to CEQA Guidelines Section 15064, an effect shall not be considered significant in the absence of substantial evidence.

CEQA Guidelines Section 15088 also recommends that revisions to the Draft EIR be noted as a revision in the Draft EIR or as a separate section of the Final EIR. Chapter 3.0 of this Final EIR identifies all revisions to the Draft EIR.

RESPONSES TO COMMENT LETTERS

Written comments on the Draft EIR are reproduced on the following pages, along with responses to those comments. To assist in referencing comments and responses, the following coding system is used:

- Each letter is lettered or numbered (i.e., Letter A) and each comment within each letter is numbered (i.e., comment A-1, comment A-2).



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
 North Central Region
 1701 Nimbus Road, Suite A
 Rancho Cordova, CA 95670-4599
 916-358-2900
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



September 26, 2024

Nicole Moore
 Contract Planner
 City of Stockton
 345 N. El Dorado Street
 Stockton, CA 95202
nicole.moore.ctr@stocktonca.gov

Subject: LeBaron Ranch
 DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
 SCH No. 2023070657

Dear Nicole Moore:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Availability of a DEIR from the City of Stockton for the LeBaron Ranch (Project) pursuant to the California Environmental Quality Act (CEQA) statute and guidelines.^[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, native plants, and their habitat. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that it, by law, may need to exercise its own regulatory authority under the Fish and Game Code.

A-1

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Fish & G. Code, § 1802.) Similarly for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

A-2

^[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

A-2
 cont'd

PROJECT DESCRIPTION SUMMARY

The Project site is located at approximately Latitude: 38.05414 and Longitude: - 121.304274 (WGS 84 datum, decimal degrees), in the northern portion of the City of Stockton Metropolitan Area, within the unincorporated area of San Joaquin County. The Project site is bounded on the north by Eight Mile Road, to the east by West Lane, and to the west by Lower Sacramento Road. The future Marlette Road, between Lower Sacramento Road and West Lane, will form the property's southern boundary.

A-3

The Project consists of a 236.30-acre Development Area, 56.03-acre Non-development Area, and 13.7 acres of existing right-of-way within a 306.03-acre plot. The development would include 1,217 single family residential units with lot sizes that would range from 3,375 to 6,000 square feet. Additionally, the Development Area would include 194 high density residential units on 9.5 acres to the west of the proposed single family residential area, for a total residential unit count of 1,411 units. The proposed Project also includes a K-8 school if approved by Lodi Unified School District (LUSD). If LUSD does not approve the site, then the site will be developed with 79 single family residential units.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City of Stockton in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the potential for the Project to have a significant impact on biological resources, CDFW concludes that an Environmental Impact Report is appropriate for the Project.

A-4

COMMENT 1: Other Insects, 3.4-29

Issue: The DEIR states the habitat present at the site is not ideal natural habitat for Crotch's bumble bee (*Bombus scrotchii*). As a candidate species, this species receives the same protections as a listed species under CESA. The lack of targeted surveys and avoidance measures could result in "take" under CESA.

A-5

Recommendation or Recommended Mitigation Measure: CDFW recommends the final EIR includes appropriate avoidance measures that will be implemented during the Project construction and operation. CDFW recommends that within one (1) year prior to vegetation removal and/or grading, a qualified entomologist, familiar with the species behavior and life

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history with the appropriate handling permits, shall conduct a minimum of two (2) surveys of all areas within the Project site to determine the presence/absence of Crotch's bumble bee. Survey methodology shall be approved by CDFW prior to survey implementation, please see CDFW's Bumble Bee Survey Considerations document (found at: nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline) for more information. . During surveys, the qualified entomologist should flag inactive small mammal burrows and other potential nest sites to reduce the risk of take. CDFW requests a copy of the survey results, including negative findings, analysis, recommendations, and field notes upon completion of surveys and no later than five (5) days prior to the start of project-related activities. Once Project activities begin, the qualified entomologist should continuously monitor potential nest sites and floral resources for Crotch's bumble bee activity for the duration of construction. If the species is detected, the qualified entomologist should notify CDFW immediately as further coordination may be required to avoid or mitigate significant impacts. Survey results including negative findings should be submitted to CDFW prior to initiation of Project activities.

A-5
 cont'd

If "take" to Crotch's bumble bee cannot be avoided either during Project construction or over the life of the Project, consultation with CDFW should be initiated to determine if a CESA incidental take permit (ITP) is necessary prior to starting or continuing any construction activities.

COMMENT 2: Bird Mortality

Issue: The introduction of buildings and artificial lighting in the development areas will impact nesting and migrating birds within the project site unless avoidance, minimization or mitigation measures are incorporated into the EIR to reduce impacts to a less than significance level. An increase in building density may adversely affect bird populations by introducing sources of common bird mortalities such as domestic cats for residents and reflective windows that birds collide with. Collisions with clear and reflective sheet glass and plastic is a leading cause in human-related bird mortalities^[2]. Many types of windows, sheet glass, and clear plastics are invisible to birds resulting in casualties or injuries from head trauma after an unexpected collision. Birds may collide with windows as little as one meter away in an attempt to reach habitat seen through, or reflected in, clear and tinted panes, so even taking small measures to increase visibility of windows to birds can make a substantial difference in minimizing long-term impacts of urban development near natural environments.

A-6

The installation of artificial lights may cause indirect effects on nesting or migrating birds by disrupting natural mating cues, which may alter the fecundity of species that occupy the riparian and open space areas adjacent to the development areas.

^[2] Klem, D. (2009). Avian Mortality at Windows: The Second Largest Human Source of Bird Mortality on Earth. Acopian Center for Ornithology, Department of Biology, Muhlenberg College, Allentown, Pennsylvania.

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Additionally, Local bird populations are severely impacted by domestic cats, which are estimated to cause over one billion bird mortalities every year in the United States and may be the single biggest cause of global bird mortality after habitat destruction^[3]. Unlike natural predators, whose populations fluctuate with prey levels, cat populations are artificially sustained through introduction of new individuals or feeding of feral individuals. Therefore, cats can contribute not only to direct bird mortality but also to the imbalance of natural factors in the birds' ecosystem. Keeping domestic cats indoors and out of native ecosystems is a key consideration for reducing environmental impacts and promoting responsible pet ownership in the community.

A-6
 cont'd

Recommendation or Recommended Mitigation Measure: Given declines in segments of the overall bird population^[4] and ecological benefits of healthy bird activity^{[5][6][7]}, CDFW recommends consideration of bird enhancement and mortality reduction strategies in project design and implementation, such as:

- An education program for any onsite residents to keep domestic cats indoors.
- Installation of screens, window patterns, or new types of glass such as acid-etched, fritted, frosted, ultraviolet patterned, or channel. Additional information can be found at <https://www.fws.gov/birds/birdenthusiasts/threats-to-birds/collisions/buildings-and-glass.php>. Incorporation of these strategies can reduce anthropogenic effects on birds and promote sustainable development in California.

COMMENT 3: Water Use, Table 3.14-5, 3.14-18

Issue: The DEIR cites the 2020 Stockton Urban Water Management Plan (UWMP) to summarize the City's projected water supply in the future, which has a substantial portion of the projected water supply coming from purchased water from Stockton East Water District (SEWD) and Woodbridge Irrigation District (WID). The DEIR does not provide any additional information about future purchasing plans. CDFW is concerned that in the absence of an extended plan, the water burden created by the development would be placed on the already critically over drafted Easter San Joaquin basin.

A-7

^[3] Dauphine, N. and Cooper, R.J. (2009) Impacts of Free-Ranging Domestic Cats (*Felis catus*) on Birds in the United States: A Review of Recent Research with Conservation and Management Recommendations. Warnell School of Forestry and Natural Resources, University of Georgia.

^[4] Douglas W Tallamy, W Gregory Shriver, Are declines in insects and insectivorous birds related?, Ornithological Applications, Volume 123, Issue 1, 1 February 2021.

^[5] Maas, B., D. S. Karp, S. Bumrungsri, K. Darras, D. Gonthier, J. C.-C. Huang, C. A. Lindell, J. J. Maine, L. Mestre, N. L. Michel, et al. . (2016). Bird and bat predation services in tropical forests and agroforestry landscapes. Biological Reviews 91:1081–1101.

^[6] Wenny, D. G., Ç. H. Şekercioğlu, N. J. Cordeiro, H. S. Rogers, and D. Kelly (2016). Seed dispersal by fruit-eating birds. In Why Birds Matter: Avian Ecological Function and Ecosystem Services (Ç. H. Şekercioğlu, D. G. Wenny, and C. J. Whelan, Editors). University of Chicago Press, IL, USA. pp. 107–146.

^[7] Fujita, M., and K. O. Kameda (2016). Nutrient dynamics and nutrient cycling by birds. In Why Birds Matter: Avian Ecological Function and Ecosystem Services (Ç. H. Şekercioğlu, D. G. Wenny, and C. J. Whelan, Editors). University of Chicago Press, IL, USA. pp. 271–297.

LeBaron Ranch
 September 26, 2024
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Recommendation or Recommended Mitigation Measure: The final EIR should evaluate how the city will accommodate the increased water burden between groundwater, purchases from SEWD and WID, and the City's existing water right permit 21176.

A-7
 cont'd

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be submitted online or mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov.

A-8

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

A-9

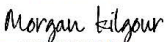
CONCLUSION

Pursuant to Public Resources Code § 21092 and § 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to R2CEQA@wildlife.ca.gov.

A-10

CDFW appreciates the opportunity to comment on the DEIR for the LeBaron Ranch to assist City of Stockton in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Questions regarding this letter or further coordination should be directed to Zach Kearns, Environmental Scientist at (916) 358-1134 or zachary.kearns@wildlife.ca.gov.

Sincerely,

DocuSigned by:

 C3A88764C0AD4F6...

Morgan Kilgour, PhD
 Regional Manager

Docusign Envelope ID: 27AFBEB5-9AC4-4A94-9F26-20B920179DFC

LeBaron Ranch
September 26, 2024
Page **6 of 6**

ec: Tanya Sheya, Environmental Program Manager
Billie Wilson, Senior Environmental Scientist (Supervisory)
Zach Kearns, Environmental Scientist
Department of Fish and Wildlife

Office of Planning and Research, State Clearinghouse, Sacramento

Response to Letter A: California Department of Fish and Wildlife

Response A-1: This comment serves as an introduction to the comment letter. No further response is necessary.

Response A-2: This comment describes the California Department of Fish and Wildlife (CDFW) regulatory role. No further response is necessary.

Response A-3: This comment correctly summarizes the proposed Project description. No further response is necessary.

Response A-4: See Responses A-5 through A-7 for detailed responses regarding the Project's potentially-significant impacts related to biological resources which are described in the body of the comment letter.

Response A-5: Crotch bumble bee (*Bombus crotchii*) is discussed on page 3.4-13 and in Impact 3.4-1 on pages 3.4-28 and 3.4-29 of Section 3.4, Biological Resources, of the Draft EIR. As shown in Table 3.4-3, appropriate habitat for this species is not present. This determination is based on the field surveys completed by Principal Biologist Steve McMurtry on April 22, 2022, and May 15, 2023. The methodology of these surveys is summarized on page 3.4-3.

Additionally, as discussed on page 3.4-28, field surveys and habitat evaluations for the entire Project site were performed on April 22, 2022, and May 15, 2023. No special-status invertebrates were observed within the Project site during field surveys and none are expected to be affected by the proposed Project based on the lack of appropriate habitat. As discussed on page 3.4-29, while crotch bumbles are documented within the nine-quad region for the Project site, they are not documented on the Project site. The habitat present on the Project site is not ideal natural habitat for this species and none are believed to be present. Further, the nearest California Natural Diversity Database (CNDDDB) occurrence of this species is over 20 miles southwest of the Project site. As such, the determination for this species is accurate.

Response A-6: Impacts associated with bird mortality are discussed in Impact 3.4-3 on pages 3.4-31 and 3.4-32 of Section 3.4, Biological Resources, of the Draft EIR. As discussed, there are eight (8) special-status birds that are documented in the CNDDDB within the nine (9)-quadrangle area for the Project site according to the CNDDDB, including: Burrowing owl (*Athene cunicularia*), California black rail (*Laterallus jamaicensis coturniculus*), Least Bell's vireo (*Vireo bellii pusillus*), Song sparrow (Modesto Population) (*Melospiza melodia*), Swainson's hawk (*Buteo swainsoni*), Tricolored blackbird (*Agelaius tricolor*), White-tailed kite (*Elanus leucurus*), and Yellow-headed blackbird (*Xanthocephalus xanthocephalus*). All of these bird species, except for Least bell's vireo, are covered species under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).

In summary, powerlines and trees located in the region represent potentially suitable nesting habitat for a variety of special-status birds. Additionally, the agricultural land

represents potentially suitable nesting habitat for some ground-nesting birds. The CNDDDB currently contains records for Swainson's hawk, burrowing owl, and tricolored blackbird in the vicinity of the Project site. In addition to the species described above, common raptors, may nest in or adjacent to the Project site. Further, indirect impacts related to bird collision with glass windows and bird mortality associated with domestic pets could occur.

Additionally, new sources of noise and light during the construction and operational phases of the project could adversely affect nesters if they located adjacent to the Project site in any given year. While avian mortality due to window collisions is a real phenomenon, CEQA-level assessments of this risk are typically limited to developments with an especially high percentage of clear and/ or reflective glazing (glass, windows) on exterior facades, and/ or other specific elements deemed likely to result in a high rate of collisions.

Glazing on the proposed residential windows would be minimal. The glazing included in the Project consists entirely of windows for the residential units, all of which are isolated from each other at regular intervals versus being grouped/conjoined to form larger contiguous window panels, and each is further divided into smaller areas. The elevations also feature forms of architectural relief (overhangs, spatially offset adjacent faces) as well as varied (opaque) materials and colors, all of which would break up the exterior visually (i.e., create “visual noise”), and increase the likelihood that birds would perceive the building overall as a solid surface.

Overall, by current architectural/design standards, the project provides minimal risk of bird collisions. The number of birds that would collide with the building over time is virtually impossible to estimate, and thus speculative. In any event, these impacts are unlikely to be significant at a regional or even local scale. In particular, bird strikes (to the degree that such occur, if at all) are more likely to involve common (and not special-status) species given their relative abundance in the area and local conditions. The impact related to bird collisions would be less than significant, and no mitigation is required.

Further, the proposed Project would eliminate the agricultural areas on the Project site, which serve as potential foraging habitat for birds throughout the year. Mitigation Measure 3.4-1 requires participation in the SJMSCP. As part of the SJMSCP, SJCOG requires preconstruction surveys for projects that initiate grading activities during the avian breeding season (March 1 – August 31). When active nests are identified, the biologists develop buffer zones around the active nests as deemed appropriate until the young have fledged. SJCOG also uses the fees to purchase habitat as compensation for the loss of foraging habitat. These ITMMs are included in Mitigation Measures 3.4-2 through 3.4-4. Implementation of the proposed Project, with the Mitigation Measures 3.4-1 through 3.4-4, would ensure that potential impacts to special status birds are reduced to a less than significant level.

Response A-7: Impacts associated with water supplies available to serve the Project are discussed in Impact 3.14-5 on pages 3.14-27 and 3.14-28 of Section 3.14, Utilities and Service Systems, of the Draft EIR. Additionally, a Water Supply Assessment (WSA) was completed for the Project (see Appendix G of the Draft EIR). As discussed, the total projected water supplies determined to be available for the proposed Project during normal, single dry, and multiple dry years during a 20-year projection will meet the projected water demand associated with the Proposed Project, in addition to existing and planned future uses, including, but not limited to, agriculture and industrial uses. Future purchasing plans for water supplies to serve the City of Stockton would be determined and analyzed by the City. Impacts related to water supplies were determined to be less than significant.

Further, impacts related to groundwater recharge are discussed in Impact 3.9-2 on page 3.9-25 of Section 3.9, Hydrology and Water Quality, of the Draft EIR. As described, potable water at the Project site would be provided by the City of Stockton Municipal Utilities Department (COSMUD), which relies on purchased water from the Calaveras, Stanislaus, and Mokelumne Rivers; surface water from the San Joaquin Delta; and groundwater. According to the WSA prepared by COSMUD for the Project, sufficient water supplies exist to meet the Project's build-out water demand as well as all existing and reasonably foreseeable water demands. Additionally, the WSA concludes that the existing near-term and long-term reliable supplies of surface water supplies and indigenous groundwater supplies can deliver a sustainable reliable water supply to meet existing and foreseeable water demands without impacting environmental values and/or impacting the current stabilization of the groundwater basin underlying the City of Stockton Metropolitan Area.

Response A-8: Any species or communities detected during the Project surveys will be reported to the CNDDB.

Response A-9: The Project applicant will pay the applicable filing fees upon filing the Notice of Determination for the Project.

Response A-10: The City will provide the CDFW with any written notification of proposed actions and pending decisions regarding the proposed Project.

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

GAVIN NEWSOM, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD

3310 El Camino Ave., Ste. 170
 SACRAMENTO, CA 95821
 (916) 574-0609



September 25, 2024

Nicole Moore
 Contract Planner
 City of Stockton
 345 N. El Dorado Street
 Stockton, CA 95202
nicole.moore.ctr@stocktonca.gov

**Subject: Comments for the Draft Environmental Impact Report, LeBaron Ranch Project,
 SCH# 2023070657, San Joaquin County**

Dear Nicole Moore,

The Central Valley Flood Protection Board (Board) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the proposed LeBaron Ranch Project (proposed project).

The proposed project involves constructing a new residential development. The proposed project is located southeast of Pixley Slough and northwest of Bear Creek. Pixley Slough and Bear Creek are regulated streams and federally regulated channels within the Board's permitting authority, therefore an encroachment permit may be required. Board permit information is available on the [Permitting at the Central Valley Flood Protection Board website](#).

B-1

While the proposed project does not anticipate construction within Pixley Slough nor Bear Creek, any activities that modifies Board regulated streams or elements of the State Plan of Flood Control within the watershed may require review and approval by the Central Valley Flood Protection Board. This includes activities that introduce encroachments, increase peak flow rates, or alter flow velocities, potentially altering channel conveyance capacity and sediment transport patterns and causing negative downstream impacts. For any such activities, compliance with California Code of Regulations Title 23, Division 1 (Central Valley Flood Protection Board) and Part 4 of Division 5 of the California Water Code would be necessary.

Responsibility of the Central Valley Flood Protection Board

The Board is the State's regulatory agency responsible for enforcing appropriate standards for the construction, maintenance, and operation of the flood control system that protects life, property, and habitat in California's Central Valley. The Board serves as the State coordinator between local flood management agencies and the federal government, with the goal of providing the highest level of flood protection possible to California's Central Valley.

B-2

The Board operates under authorities as described in California Water Code (Water Code), which requires the Board to oversee future modifications or additions to facilities of the State Plan of Flood Control (SPFC). In addition, pursuant to assurances provided to the United States

City of Stockton
 September 25, 2024
 Page 2

Army Corps of Engineers (USACE) by the Board on behalf of the State, the USACE Operation and Maintenance Manuals, Code of Federal Regulations, Title 33, Section 208.10, and United States Code, Title 33, Section 408, the Board is responsible for the operation and maintenance of the SPFC facilities. The USACE requires the Board to serve as the lead non-Federal sponsor for projects to improve or alter facilities of the SPFC pursuant to Code of Federal Regulations, Title 33, Section 408. The State's objectives include fulfilling the USACE's expectations pursuant to the assurances provided to the USACE.

B-2
 cont'd

Encroachment Permit

Per California Code of Regulations, Title 23, Waters, Division 1 (Title 23), Section 6, approval by the Board is required for all proposed work or uses, including the alteration of levees within any area for which there is an Adopted Plan of Flood Control within the Board's jurisdiction. In addition, Board approval is required for all proposed encroachments within a floodway, on adjacent levees, and within any Regulated Stream identified in Title 23, Table 8.1. Specifically, Board jurisdiction includes the levee section, the waterward area between project levees, a minimum 10-foot-wide strip adjacent to the landward levee toe, the area within 30 feet from the top of bank(s) of Regulated Streams, and inside Board's Designated Floodways. Activities outside of these limits which could adversely affect Federal-State flood control facilities, as determined by Board staff, are also under the Board's jurisdiction. Permits may also be required for existing unpermitted encroachments or where it is necessary to establish the conditions normally imposed by permitting, including where responsibility for the encroachment has not been clearly established or ownership or uses have been changed.

B-3

Federal permits, including USACE Section 404 and Section 10 regulatory permits and Section 408 Permission, in conjunction with a Board permit, may be required for the proposed project. In addition to federal permits, state and local agency permits, certification, or approvals may also be required. State approvals may include, but are not limited to, California Department of Fish and Wildlife's Lake and Streamed Alteration Agreement and Central Valley Regional Water Quality Control Board's Section 401 Water Quality Certification and/or Waste Discharge Requirement. The Applicant must obtain all authorizations that the proposed project may require.

Flood Impacts Analysis

Pursuant to Section 15 of Title 23, the Board may deny an encroachment permit if the proposed project could:

- Jeopardize directly or indirectly the physical integrity of levees or other works
- Obstruct, divert, redirect, or raise the surface level of design floods or flows, or the lesser flows for which protection is provided
- Cause significant adverse changes in water velocity or flow regimen
- Impair the inspection of floodways or project works
- Interfere with the maintenance of floodways or project works
- Interfere with the ability to engage in flood fighting, patrolling, or other flood emergency activities
- Increase the damaging effects of flood flows
- Be injurious to, or interfere with, the successful execution, functioning, or operation of any adopted plan of flood control

B-4

City of Stockton
September 25, 2024
Page 3

- Adversely affect the State Plan of Flood Control, as defined in the California Water Code

The Board, as a Responsible Agency under the California Environmental Quality Act (CEQA), will review and consider the environmental effects of the proposed project identified in the DEIR, and will reach its own conclusions on whether and how to approve the project involved (14 CCR 15096, subd. (a)). This includes direct impacts to facilities under construction, as well as indirect impacts from the proposed project to surrounding facilities.

B-4
cont'd

Closing

The potential risks to public safety, including increased flood risks, need to be considered when developing proposed projects that seek to modify flood control works or the hydrology of the water ways. Board staff is available to discuss any questions you have regarding the above comments. Please contact Jordan Robbins at (916) 524-3454, or via email at Jordan.Robbins@CVFlood.ca.gov if you have any questions.

B-5

Sincerely,

Jamie Silva

Jamie Silva
Environmental Program Manager

cc: Office of Planning and Research
State.Clearinghouse@opr.ca.gov

Response to Letter B: Central Valley Flood Protection Board

Response B-1: This comment serves as an introduction to the comment letter. See responses to comments B-4 and B-5 below for details. No further response is necessary.

Response B-2: This comment describes the Central Valley Flood Protection Board regulatory role. No further response is necessary.

Response B-3: As discussed on pages 3.4-34 and 3.4-35 of Section 3.4, Biological Resources, of the Draft EIR, development of the proposed Project would include construction of a new storm basin near Eight Mile Road, and two (2) options for connecting to offsite drainage facilities are being considered and evaluated. Option One would connect to a new outfall structure to the north of the basin and pump storm water into the Woodbridge Irrigation District drainage ditch that is located south of, and parallel to Eight Mile Road. Option Two is construction of a force main to Pixley Slough to an existing outfall structure. The force main would be located south of, and parallel Eight Mile Road. Should Option Two be required, no encroachment into Pixley Slough would be required. Should Option One be required, an encroachment permit would be required.

The Project site does not contain jurisdictional wetland habitat. The irrigation ditches are manmade agricultural irrigation facilities that are not jurisdictional. Water flows are controlled by the irrigation district that owns the facilities. There are no other aquatic features. Section 404, Section 401, or Section 408 permissions, or a Lake and Streambed Alteration Agreement, would not be required.

Additionally, as noted on page 3.9-8 of Section 3.9, Hydrology and Water Quality, Because the City of Stockton participates in the National Flood Insurance Program, it must require development permits to ensure that construction materials and methods will mitigate future flood damage, and to prevent encroachment of development within floodways. Pursuant to Chapter 15.44, Flood Damage Prevention, of the City's Municipal Code, new construction and substantial improvements of residential structures are also required to "have the lowest habitable floor (including the basement if it is, or easily could be 'habitable') elevated to or above the base flood level." Non-residential structures must have their utility systems above the BFE or be of flood-proof construction.

Response B-4: This comment is noted. See Response B-3 regarding encroachment of development. No encroachment permit is required for the Project; as such, this comment does not apply.

Response B-5: This comment serves as a conclusion to the comment letter. No further response is necessary.



SAN JOAQUIN
COUNTY
Greatness grows here.

Environmental Health Department

Jasjit Kang, REHS, Director

Muniappa Naidu, REHS, Assistant Director

PROGRAM COORDINATORS

Jeff Carruesco, REHS, RDI

Willy Ng, REHS

Steven Shih, REHS

Elena Manzo, REHS

Natalia Subbotnikova, REHS

September 19, 2024

To: City of Stockton Planning Department
Attention: Nicole Moore

From: Aaron Gooderham (209) 616-3062
Senior Registered Environmental Health Specialist

RE: **LeBaron Ranch, Draft Environmental Impact Report, SU-2400146**
LeBaron Ranch Project Site

The San Joaquin County Environmental Health Department (EHD) is supportive of this project in regards to the provision of full public services. The San Joaquin County Environmental Health Department (EHD) recommends the following conditions as a part of developing this project:

C-1

1) Destroy the abandoned well located on the north-east corner of APN 08405008 under permit and inspection by the Environmental Health Department as required by San Joaquin County Development Title, Section 9-601.020(e).

C-2

2) Any geotechnical drilling shall be conducted under permit and inspection by The Environmental Health Department (San Joaquin County Development Title, Section 9-601.010(b) and 9-601.020(i)).

C-3

3) Before any hazardous materials/waste can be stored or used onsite, the owner/operator must report the use or storage of these hazardous materials to the California Environmental Reporting System (CERS) at cers.calepa.ca.gov/ and comply with the laws and regulations for the programs listed below (based on quantity of hazardous material in some cases). The applicant may contact the Program Coordinator of the CUPA program, Elena Manzo (209) 953-7699, with any questions.

a) Any amount but not limited to the following hazardous waste; hazardous material spills, used oil, used oil filters, used oil-contaminated absorbent/debris, waste antifreeze, used batteries or other universal waste, etc. – Hazardous Waste Program (Health & Safety Code (HSC) Sections 25404 & 25180 et sec.)

C-4

b) Onsite treatment of hazardous waste – Hazardous Waste Treatment Tiered Permitting Program (HSC Sections 25404 & 25200 et sec. & California Code of Regulations (CCR), Title 22, Section 67450.1 et sec.)

c) Reportable quantities of hazardous materials-reportable quantities are 55 gallons or more of liquids, 500 pounds for solids, or 200 cubic feet for compressed gases, with some exceptions. Carbon dioxide is a regulated substance and is required to be reported as a hazardous material if storing 1,200 cubic feet (137 pounds) or more onsite in San Joaquin County – Hazardous Materials Business Plan Program (HSC Sections 25508 & 25500 et sec.)

- d) Any amount of hazardous material stored in an Underground Storage Tank – Underground Storage Tank Program (HSC Sections 25286 & 25280 et sec.)
 - i) If an underground storage tank (UST) system will be installed, a permit is required to be submitted to, and approved by, the San Joaquin County Environmental Health Department (EHD) before any UST installation work can begin.
 - ii) Additionally, an EHD UST permit to operate is required once the approved UST system is installed.
- e) Storage of at least 1,320 gallons of petroleum aboveground or any amount of petroleum stored below grade in a vault – Aboveground Petroleum Storage Program (HSC Sections 25270.6 & 25270 et sec.)
 - i) Spill Prevention, Countermeasures and Control (SPCC) Plan requirement
- f) Threshold quantities of regulated substances stored onsite - California Accidental Release Prevention (CalARP) Program (Title 19, Section 2735.4 & HSC Section 25531 et sec.)
 - i) Risk Management Plan requirement for covered processes

C-4
cont'd

Response to Letter C: San Joaquin County Environmental Health Department

Response C-1: This comment serves as an introduction to the comment letter. No further response is necessary.

Response C-2: This comment is noted. There are no abandoned wells within the Project site. Nevertheless, it is the City's policy to require any wells to be abandoned shall be abandoned/destroyed under permit and inspection by the EHD (San Joaquin County Development Title, Section 9-1110.3 & 9-1110.4). This is an existing regulation that is in place and there is not a need for a measure requiring this existing requirement.

Response C-3: This comment is noted. A final geotechnical evaluation of soils at a design-level would be prepared for the Project. The geotechnical evaluation would be prepared in accordance with the standards and requirements outlined in the California Building Code (CBC), Title 24, Part 2, Chapter 16, Chapter 17, and Chapter 18, which addresses structural design, tests and inspections, and soils and foundation standards. Implementation of requirement would ensure that all on-site fill soils are properly compacted and comply with the applicable safety requirements established by the CBC to reduce risks associated with unstable soils and excavations and fills, and that any issues associated with unstable soils are addressed at the design level. This work will be performed at a design level, and it is not known at this time if drilling would be necessary, or if a less sampling method would be appropriate. Nevertheless, it is the City's policy to require any geotechnical drilling to be conducted under permit and inspection by The Environmental Health Department (San Joaquin County Development Title, Section 9-1115.3 and 9-1115.6). This is an existing regulation that is in place and there is not a need for a measure requiring this existing requirement.

Response C-4: This comment is noted. As discussed in Section 3.8, Hazards and Hazardous Materials, the operational phase would occur after construction is completed and business operations commence on a day-to-day basis. The Project proposes to construct a primarily residential development comprised of up to 1,411 residential units, parks/open space, and a school site within the Development Area, as well as circulation and infrastructure improvements. The Project does not propose uses that would involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular household maintenance of buildings and landscaping. The quantities of these materials would not typically be at an amount that would pose a significant hazard to the public or the environment. While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to reduce risk to acceptable levels. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable federal, State, and local laws and regulations would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials during the operational phase of the proposed Project would be less than significant.



Balancing Community and Commerce

44 N. SAN JOAQUIN STREET □ SUITE 374 □ STOCKTON, CA 95202 □ 209-468-3198

September 27, 2024

Nicole Moore
City of Stockton
345 N. El Dorado Street
Stockton, CA 95202
Via email: Nicole.Moore.Ctr@stocktonca.gov

**SUBJECT: Comments on Notice of Availability of a Draft EIR
LeBaron Ranch Project, State Clearinghouse Number 2023070657**

Dear Ms. Moore:

Thank you for sending San Joaquin LAFCo the Notice of Availability for the *Draft Environmental Impact Report for the LeBaron Ranch Project*. San Joaquin LAFCo appreciates the opportunity to review and comment on the Draft EIR pursuant to the California Environmental Quality Act (Pub. Res. Code § 21000 et seq.: "CEQA") and the State CEQA Guidelines (14 C.C.R. § 15000 et seq.). LAFCo staff has reviewed this document and offers the following comments.

LAFCo is an independent, regulatory agency with discretion to approve, wholly, partially or conditionally, or disapprove, changes of organization or reorganizations. In accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("CKH Act"), LAFCo is required to consider various factors when evaluating a proposal, including, but not limited to, impacts to agricultural and open space lands, the provision of municipal services and infrastructure to the project site, timely and available supply of water, fair share of regional housing, consistency with regional plans, and other factors.

The factors relating to boundary changes are contained in Government Code ("GC") §56668. Including an assessment of these factors in the County's environmental document will facilitate LAFCo's review and the LAFCo process. Deficiencies in the environmental document as required by LAFCo may result in the need for additional CEQA compliance work.

As a Responsible Agency pursuant to the CEQA, LAFCo would like to rely on the County's EIR in consideration of any local agency boundary change required for the project. Given that LAFCo's approvals will be a fundamental part of the entitlements required for this project, the EIR should specifically address the following:

D-1

2.0 Project Description

1. Page 2.0-12: “Annexation” section appears unfinished as last sentence ends in ellipses without a conclusion.
2. Page 2.0-13: San Joaquin LAFCo is listed as an agency whose approval is required for annexation. Please add that LAFCo is also the approving authority for the detachment from Lincoln Rural Fire Protection District. Lincoln Rural Fire Protection District currently contracts with the City of Stockton for services, so the service provider will remain the same and has capacity for services in this area.
3. Page 2.0-13: Under “City of Stockton,” revise “Approval of Annexation and Authorization to Submit Annexation Request to San Joaquin LAFCo” to add “and Submit Detachment Request for Lincoln Fire District.”
4. Annexation Timing: The Final EIR should discuss the timing of annexation relative to timing of the proposed development plans. Typically, LAFCo’s organization/reorganization processes will be required after project approvals and prior to map recordation. In the case of a phased map, all approvals should occur prior to recordation of the first phase of the map so as not to create island territory issues.

D-2

3.10 Land Use, Population and Housing

5. Annexation of Rights of Way: Per San Joaquin LAFCo’s standards for annexation, “LAFCo will require cities to annex streets where adjacent lands that are in the city will generate additional traffic or where the annexation will isolate sections of county road. Cities shall include all contiguous public roads that can be included without fragmenting governmental responsibility by alternating city and county road jurisdiction over short section of the same roadway.” Any annexation of the subject property should include surrounding roadways and rights of way to avoid the creation of islands and/or illogical boundaries pursuant to Section 56668 of the CKH Act.

The proposed Right-of-Way Annexation Area includes Eight Mile Road along the northern boundary of the project site. Please clarify whether other contiguous roadways are within the City sphere/City maintained mileage system. To this end, it would be useful if the EIR included an exhibit showing the annexation areas, including right-of-way annexation, and what is to be maintained by the City versus the County. All of Marlette Road, Eight Mile Road, West Lane, and Lower Sacramento Road contiguous to the project site should be annexed to the City, where not already within the City limits. In addition, all rights of way stranded in the creation of the unincorporated island to the south should be considered for annexation to the City in coordination with the County Public Works Department.

D-3

6. Evaluate Difference in Density and Population of Existing Versus Proposed Uses: While the project area was evaluated in the 2020 City of Stockton Sphere of Influence (SOI)

D-4

- | | |
|--|-----------------------|
| <p>Plan/Municipal Service Review (MSR), and the City was projected to meet all water demands, sewer demands, stormwater provisions, police services, and fire services within its SOI, it is unclear whether that evaluation is still relevant or needs to be updated. The proposed project's "reorganization" of land uses described in the Draft EIR includes modification of the acreages of various General Plan land use designations that were used for the 2020 MSR, which could result in greater density and population than evaluated in the MSR and General Plan EIR. The Land Use, Population and Housing chapter should include an analysis of density and population changes between existing and proposed land use quantities (preferably in tabular format), which should in turn be addressed in the Public Services and Utilities chapters (3.12 and 3.14).</p> | <p>D-4
cont'd</p> |
| <p>7. <u>2020 City of Stockton Sphere of Influence (SOI) Plan/Municipal Service Review (MSR)</u>: In addition, the 2020 MSR states on page 2-25 that the "balance of the area north of City limit, south of Eight Mile Road," which includes the project site and several other properties, is "expected to accommodate up to 1,380 new single-family homes, 1,200 new multi-family homes, and 39,000 square feet of new commercial and office development." The proposed project includes up 1,217 new single-family residential units, or 88 percent of the planned single-family homes evaluated in the MSR, even though much of the remaining territory which encompasses an area larger than the project site is planned for single-family development in the 2040 General Plan Land Use Map. An update to the 2020 MSR is likely needed and will be required prior to LAFCo approval of the annexation. This issue should be addressed in the EIR as LAFCo would like to rely on the County's EIR in consideration of any local agency boundary change required for the project.</p> | <p>D-5</p> |
| <p>8. <u>Impact 3.10-2: Conflicts with Land Use Plans and Policies</u>: The Draft EIR concludes that Impact 3.10-2 is less than significant. Although LAFCo has expressed support for annexation of the property as noted in the Draft EIR, the project will nonetheless result in the creation of an island territory inconsistent with the CKH Act Section 56668(f). In addition, CKH Act Section 56377 states that "Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area." The conversion of farmlands of importance is in itself a significant and unavoidable impact per Impact 3.2-1. The development of the proposed project, although planned in the City's General Plan and included in the City's SOI, was presumably contingent upon the orderly development of the territories within the SOI in such a manner that would not create island territories (e.g., in the project area, from south to north). LAFCo therefore recommends that this impact be considered significant and unavoidable, and if the project is approved, findings of overriding consideration made, which could include the infeasibility of annexation of areas to the south, the right to farm ordinances within the City and County, and the farmland mitigation programs in place, among other socioeconomic justifications. This approach provides the transparency that CEQA requires for public informational purposes, noting the significance of inconsistency with specific policies in place to prevent</p> | <p>D-6</p> |

the creation of islands and loss of important farmlands and allowing the public the opportunity to consider any findings of overriding consideration.

D-6
cont'd

9. Map of City boundaries and Spheres of Influence: It would be useful if this chapter included a map showing the project site in relation to the City boundaries and Spheres of Influence so that the creation island territories can be clearly seen.

D-7

3.12 Public Services and Recreation and 3.14 Utilities and Service Systems

10. Evaluate Difference in Density and Population of Existing Versus Proposed Uses Vis-à-vis the Provision of Services: See item 6 above. Once the analysis is updated to define any differences between existing and proposed populations and densities, these data should be used to update the analyses in the Public Service and Utilities chapters. LAFCo will rely on these analyses in the annexation application request.

D-8

Thank you for the opportunity to comment on the LeBaron Ranch Draft EIR. Please contact the LAFCo office if you have any questions.

D-9

Sincerely,


J.D. Hightower
Executive Officer

Response to Letter D: San Joaquin County LAFCO

Response D-1: This comment serves as an introduction to the comment letter and discusses LAFCO's regulatory responsibility. See Responses D-2 through D-9.

Response D-2: The error on page 2.0-12 of Chapter 2.0, Project Description, of the Draft EIR has been corrected to remove the incomplete sentence. See Chapter 3.0, Revisions, of this Final EIR.

The requested text additions have been added to page 2.0-13 of Chapter 2.0, Project Description. See Chapter 3.0, Revisions, of this Final EIR.

As discussed in Chapter 2.0, Project Description, of the Draft EIR, the Project would establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements that are required to meet City standards, both onsite and offsite. Internal Phases will basically commence from the eastern portion of the Development Area and move west, allowing infrastructure to be advanced to an upcoming phase. The Project approvals would occur prior to recordation of the first phase of the tentative map so as not to create island territory issues.

Response D-3: As shown in Table 2.0-1 on page 2.0-2 of Chapter 2.0, Project Description, of the Draft EIR, the proposed annexation area includes 13.7 acres of right-of-way. Figure 2.0-3 illustrates the Assessor Parcel Numbers and extent of the proposed annexation area. As shown, Eight Mile Road and Marlette Road are within the Project site (or Annexation Area). The roadways which would be annexed as part of the Project would be maintained by the City. Lower Sacramento Road, the adjacent west roadway, would not be annexed as part of the Project as the extent of this roadway adjacent to the Project site is within the City limits.

It is also noted that a new figure depicting the annexation area has been added to Chapter 2.0, Project Description, of the Draft EIR in order to address this comment. See Chapter 3.0, Revisions, of this Final EIR for the new figure.

Response D-4: A comparison of the proposed Project population with the population allowed under the existing General Plan is discussed in Impact 3.10-3. As discussed, according to the Department of Finance population estimates for the year 2023, the population in Stockton is 319,731 people. The proposed Project would include the development of approximately 236.6-acres of land which will include: residential, parks, open space, public facilities, and public roadway right-of-way land uses. The proposed Project establishes a site for a 12.0-acre K-8 school to be developed by Lodi Unified School District (LUSD). The development of a K-8 school at this site is the discretionary decision of the LUSD, and while the proposed Project has planned for a school at this location, it will be determined by LUSD later through their decision-making process. If the LUSD decides to not pursue building a school at this site, then the site would be developed with 79 single family residential units. Construction of homes in this location would increase the number

of units by 79 units when compared to the proposed Project with the school site. The total combined residential units would increase from 1,332 under the proposed Project to 1,411 units under this variation (i.e., no school). Using the most recent Department of Finance data (2023) for the average number of persons residing in a dwelling unit in the City of Stockton (3.13 persons per household), the Project could result in 4,169 to 4,416 residents.

The proposed Project would not result in direct population growth beyond the City's capacity identified in the General Plan; rather, it would result in a reduction of the total number of units anticipated under the General Plan by approximately 662 to 741 units. The net population reduction associated with the reduction of units under the proposed Project (compared to the capacity assumed for the Project site under the General Plan) is anticipated to be 2,072 to 2,319 persons.

Response D-5: The City of Stockton Municipal Service Review (MSR) (2020) includes Figure 2-7, 10-Year Planning Horizon Annexation Areas, which shows where annexations within the City's current Sphere of Influence (SOI) would contribute to addressing demand over the 10-year horizon (i.e., prior to 2030). Any areas that aren't completely developed by 2030 are assumed to be built out by the end of the 20-year horizon. One of the areas identified in Figure 2-7 identified the following area: "Balance of area north of City limit, south of Eight Mile Road: According to the 2040 General Plan EIR, this area is expected to accommodate up to 1,380 new single-family homes, 1,200 new multifamily homes, and 39,000 square feet of new commercial and office development."

As shown in Table 2.0-3 of the Draft EIR, the Project includes up to 1,217 single-family residential units, or 88 percent of the single-family residential units assumed for the "Balance of area north of City limit, south of Eight Mile Road" identified in the MSR. It is noted that this percentage would decrease slightly if the proposed school site is built. Additionally, the Project includes up to 194 multi-family residential units, or 16 percent of the multi-family residential units assumed for the "Balance of area north of City limit, south of Eight Mile Road" identified in the MSR.

The Project would be developed in six phases. Assuming the Project is approved in 2025, the first house in phase one will be ready to sell in 2027. The entire Project will take between seven and ten years to buildout, resulting in full buildout estimated between 2034 to 2037.

Ultimately, as noted in Section 3.10, Land Use, Population and Housing of the Draft EIR, LAFCo will determine whether the proposed annexation would first require an update to the City of Stockton Sphere of Influence Plan/Municipal Service Review (2020) to approve the annexation. This LAFCo policy was not specifically adopted to avoid or mitigate an environmental effect, rather it is intended to ensure orderly and logical reorganization to local jurisdiction boundaries, including annexations. The proposed Project is generally consistent with LAFCo policies adopted to address environmental impacts. Section 3.2, Agricultural Resources, addresses impacts related to conversion of agricultural land and

includes all feasible mitigation measures to reduce impacts to prime farmland. Nevertheless, annexation and subsequent urban development of the Project site will have a significant and unavoidable impact on prime farmland. This topic was analyzed as part of the City's General Plan Draft EIR, and ultimately the City approved land use designations that would allow for the conversion of the prime farmland to an urban use.

Response D-6: As described in Impact 3.10-2 of the Draft EIR, the pre-planning process for the proposed Project included meetings with Jim Glaser, former Executive Officer of the San Joaquin LAFCo, and JD Hightower, current Executive Officer of the San Joaquin LAFCo, to discuss the proposed annexation. Per LAFCo's recommendation, the Project applicant consulted with and reviewed information related to properties south of the proposed Project, which would become an island of unincorporated territory upon annexation of the proposed Project site, to evaluate the potential annexation of the southern sites to the City as part of the proposed Project. The ownerships of the parcels to the south of the Project site were not in a position to join in the proposed annexation proposed by the Project. The primary reasons were either the properties were not under contract with a developer and/or Williamson Act contracts are on several properties and no non-renewals to cancel the Williamson Act contracts have been filed. Jim Glaser and the Project applicant had several phone calls to further discuss the proposed annexation. It was concluded that a reasonable effort had been made to include the island in the annexation, but the status of those properties at this time did not make sense to join the annexation.

As noted in Policy LAFCO Change of Organization Policies and Procedures (Including Annexations and reorganizations) (As Amended 12/14/12), LAFCo may nevertheless approve an annexation that creates an island where it finds that the application of this policy would be detrimental to the orderly development of the community and that a reasonable effort has been made to include the island in the annexation but that inclusion is not feasible at this time.

With respect to farmland, a significant and unavoidable impact is identified in Section 3.2, Agricultural Resources, of the Draft EIR. Findings of overriding considerations have been made for this impact.

Ultimately, as noted in Section 3.10, Land Use, Population and Housing of the Draft EIR, the *LAFCo Change of Organization Policies and Procedures (Including Annexations and Reorganizations)* was not specifically adopted to avoid or mitigate an environmental effect, rather it is intended to ensure orderly and logical reorganization to local jurisdiction boundaries, including annexations. The proposed Project is generally consistent with LAFCo policies adopted to address environmental impacts. Section 3.2, Agricultural Resources, addresses impacts related to conversion of agricultural land and includes all feasible mitigation measures to reduce impacts to prime farmland. Nevertheless, annexation and subsequent urban development of the Project site will have a significant and unavoidable impact on prime farmland. This topic was analyzed as part of the City's General Plan Draft EIR, and ultimately the City approved land use designations that would allow for the conversion of the prime farmland to an urban use.

Response D-7: A new figure depicting the annexation area has been added to Chapter 2.0, Project Description, of the Draft EIR. See Chapter 3.0, Revisions, of this Final EIR for the new figure.

Response D-8: See Response D-4.

Response D-9: This comment serves as a conclusion to the comment letter. No further response is necessary.



September 25, 2024

Nicole Moore
City of Stockton
345 North El Dorado Street
Stockton, CA 95202

Project: Draft Environmental Impact Report for the LeBaron Ranch Project

District CEQA Reference No: 20240963

Dear Ms. Moore:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report (DEIR) from the City of Stockton (City) for the above project. Per the DEIR, the project consists of 1,217 single-family homes and 194 high density residential units, for a total residential unit count of 1,411 units and 30.7 acres of parkland and open space (Project). The Project is bounded on the north by Eight Mile Road, to the east by West Lane, and to the west by Lower Sacramento Road (APNs 084-050-06, -07, -08, -14, -27, and -28).

E-1

The District offers the following comments at this time regarding the Project:

1) Construction Emissions

E-2

The District recommends, to further reduce impacts from construction-related diesel exhaust emissions, the Project should utilize the cleanest available off-road construction equipment.

2) Voluntary Emission Reduction Agreement

E-3

Per the DEIR, Table 3.3-10 (Operational Project Generated Emissions - Mitigated) demonstrates Project operational emissions are expected to exceed the District's significance thresholds. Therefore, the District recommends the DEIR be revised to include a Voluntary Emission Reduction Agreement (VERA) for this Project.

A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project proponent and the District enter

Samir Sheikh

Executive Director/Air Pollution Control Officer

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into a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-related impacts on air quality can be mitigated. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of agricultural equipment with the latest generation technologies.

E-3
cont'd

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-related emissions have been mitigated. To assist the Lead Agency and project proponent in ensuring that the environmental document is compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA.

3) Health Risk Screening/Assessment

Although the DEIR includes a discussion on sensitive receptors and sources of Toxic Air Contaminants (TACs), the DEIR did not assess the potential air quality impacts from the Project to nearby sensitive receptors. Additionally, there are residential units surrounding the project area. The Project may have the potential to impact sensitive receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.). Therefore, the District recommends that the City evaluate the risk associated with the Project for sensitive receptors in the area and mitigate any potentially significant risk to help limit exposure of sensitive receptors to emissions.

To determine potential health impacts on surrounding receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) a Prioritization and/or a Health Risk Assessment (HRA) should be performed for the Project. These health risk determinations should quantify and characterize potential TACs identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health.

E-4

Health risk analyses should include all potential air emissions from the project, which include emissions from construction of the project, including multi-year construction, as well as ongoing operational activities of the project. Note, two common sources of TACs can be attributed to diesel exhaust emitted from heavy-duty off-road earth moving equipment during construction, and from ongoing operation of heavy-duty on-road trucks.

Prioritization (Screening Health Risk Assessment):

A "Prioritization" is the recommended method for a conservative screening-level health risk assessment. The Prioritization should be performed using the California Air Pollution Control Officers Association's (CAPCOA) methodology. Please contact the District for assistance with performing a Prioritization analysis.

The District recommends that a more refined analysis, in the form of an HRA, be performed for any project resulting in a Prioritization score of 10 or greater. This is because the prioritization results are a conservative health risk representation, while the detailed HRA provides a more accurate health risk evaluation.

Health Risk Assessment:

Prior to performing an HRA, it is strongly recommended that land use agencies/ project proponents develop and submit for District review a health risk modeling protocol that outlines the sources and methodologies that will be used to perform the HRA.

A development project would be considered to have a potentially significant health risk if the HRA demonstrates that the health impacts would exceed the District's established risk thresholds, which can be found here:

<https://ww2.valleyair.org/permitting/ceqa/>.

A project with a significant health risk would trigger all feasible mitigation measures. The District strongly recommends that development projects that result in a significant health risk not be approved by the land use agency.

The District is available to review HRA protocols and analyses. For HRA submittals please provide the following information electronically to the District for review:

- HRA (AERMOD) modeling files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodologies.

For assistance, please contact the District's Technical Services Department by:

- E-Mailing inquiries to: hramodeler@valleyair.org
- Calling (559) 230-5900

4) Ambient Air Quality Analysis

Per the DEIR, Table 3.3-10 (Operational Project Generated Emissions - Mitigated) demonstrates the Project is expected to exceed 100 pounds per day of emissions. As such, the District recommends an Ambient Air Quality Analysis (AAQA) be

E-4
cont'd

E-5

performed. An AAQA uses air dispersion modeling to determine if emission increase from a project will cause or contribute to a violation of State or National Ambient Air Quality Standards. An acceptable analysis would include emissions from both project-specific permitted and non-permitted equipment and activities. The District recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

E-5
 cont'd

Specific information for assessing significance, including screening tools and modeling guidance, is available online at the District's website:
<https://ww2.valleyair.org/permitting/ceqa/>.

5) Clean Lawn and Garden Equipment in the Community

Since the Project consists of residential development, gas-powered residential lawn and garden equipment have the potential to result in an increase of NOx and PM2.5 emissions. Utilizing electric lawn care equipment can provide residents with immediate economic, environmental, and health benefits. The District recommends the Project proponent consider the District's Clean Green Yard Machines (CGYM) program which provides incentive funding for replacement of existing gas powered lawn and garden equipment. More information on the District CGYM program and funding can be found at: <https://ww2.valleyair.org/grants/zero-emission-landscaping-equipment-voucher-program/>.

E-6

6) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

E-7

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: <https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations>. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (209) 557-6446.

6a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

E-7
cont'd

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (209) 557-6446.

6b) District Rule 9510 - Indirect Source Review (ISR)

The Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 50 residential units.

The purpose of District Rule 9510 is to reduce the growth in both NO_x and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The ISR Rule requires developers to mitigate their NO_x and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Per Section 5.0 of the ISR Rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510 so that proper mitigation and clean air design under ISR can be incorporated into the Project's design. One AIA application should be submitted for the entire Project.

E-8

Information about how to comply with District Rule 9510 can be found online at: <https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview>

The AIA application form can be found online at:

<https://www2.valleyair.org/permitting/indirect-source-review-rule-overview/forms-and-applications/>

E-8
cont'd

District staff is available to provide assistance and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

6c) District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

The Project will be subject to District Rule 4002 since the Project will include demolition and removal of existing structures. To protect the public from uncontrolled emissions of asbestos, this rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Any asbestos present must be handled in accordance with established work practice standards and disposal requirements.

E-9

Information on how to comply with District Rule 4002 can be found online at: <https://www2.valleyair.org/compliance/demolition-renovation/>.

6d) District Rule 4601 (Architectural Coatings)

The Project will be subject to District Rule 4601 since it is expected to utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: <https://www2.valleyair.org/media/tkgjeusd/rule-4601.pdf>

E-10

6e) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities*.

E-11

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500

cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

E-11
cont'd

The application for both the Construction Notification and Dust Control Plan can be found online at: <https://ww2.valleyair.org/media/fm3jrbsq/dcp-form.docx>

Information about District Regulation VIII can be found online at:
<https://ww2.valleyair.org/dustcontrol>

6f) District Rule 4901 - Wood Burning Fireplaces and Heaters

The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices. This rule establishes limitations on the installation of new wood burning fireplaces and wood burning heaters. Specifically, at elevations below 3,000 feet in areas with natural gas service, no person shall install a wood burning fireplace, low mass fireplace, masonry heater, or wood burning heater.

E-12

Information about District Rule 4901 can be found online at:
<https://ww2.valleyair.org/compliance/residential-wood-smoke-reduction-program/>

6g) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

E-13

7) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent.

E-14

If you have any questions or require further information, please contact Dylan Casares by e-mail at Dylan.Casares@valleyair.org or by phone at (559) 230-6574.

E-15

Sincerely,

Tom Jordan
Director of Policy and Government Affairs



For: Mark Montelongo
Program Manager

Response to Letter E: San Joaquin Valley Air Pollution Control District

Response E-1: This comment is noted, as this comment provides an introductory statement, introducing the comment letter and summarizing the Project details. No further response to this comment is warranted.

Response E-2: As described in Table 3.3-12 of Section 3.3, Air Quality, of the Draft EIR, the proposed Project would not generate construction-related emissions that would exceed the San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds for construction-generated emissions. Therefore, mitigation to reduce construction-related criteria pollutant emissions would not be required. Nevertheless, regardless of emission quantities, the SJVAPCD requires construction-related control measures in accordance with their rules and regulations. Implementation of these control measures, as provided on pages 3.3-37 and 3.3-38 of the Draft EIR (incorporated as mitigation measures), would further reduce proposed Project construction related emissions to the extent possible.

Response E-3: This comment is noted. Mitigation Measure 3.3-4 has been added to the errata, to reflect this comment. Mitigation Measure 3.3-4 of the FEIR requires the City to educate the Project applicant(s) on the benefits of a VERA, and requires the Project applicant(s) to enter into a VERA with the SJVAPCD, if emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510 are not sufficient to reduce emissions to below the applicable SJVAPCD thresholds of significance for operation ROG. If conditions warrant participation in a VERA, the VERA shall demonstrate a reduction in emissions that reduces the ROG operational emissions to below the applicable threshold, through a process that funds and implements emissions reduction projects within the SJVAB. The types of emission reduction projects that could be funded include replacing old heavy-duty trucks with cleaner, more efficient heavy-duty trucks, for example. If a VERA is found to be required, and the applicant elects to enter into one, the project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level.

It is noted that Rule 9510 is a regulation that is imposed by the SJVAPCD to collect fees for emissions that exceed the threshold of significance established by the SJVAPCD after all calculated onsite and offsite mitigation, from construction and operation of the building/end user, can be calculated and is applied. The proposed Project is subject to the SJVAPCD Rule 9510 (Indirect Source Review [ISR] rule), which could result in substantial mitigation of emissions beyond what is reflected in the modeling outputs provided in the EIR. The reductions are accomplished by the incorporation of measures into individual projects and/or by the payment of an Indirect Source Rule fee for any required reductions that have not been accomplished through Project mitigation commitments. The actual calculations will be accomplished by the SJVAPCD and project applicants through the regulatory permitting process as the Project (i.e., or portions of the Project) are brought forward for approval under Rule 9510. The Project applicant would be required to pay the ISR fee to the SJVAPCD at that time. Ultimately, the SJVAPCD utilizes the fees to fund offsite projects that reduce emissions to at, or below, the thresholds of significance

established by the SJVAPCD. The performance-based metric for each individual case, is actual emissions compared to the threshold. No further response to this comment is warranted.

Response E-4: The proposed Project is primarily a residential project which will provide up to 1,411 units (assuming the school site is developed with single-family residential units), which also includes parks, trails, and open space. The proposed Project is not a Project that would be considered to have potential to generate significant levels of TACs. That is, overall, the risk of the Project to generate TACs which would exceed the SJVAPCD's TAC thresholds is negligible.

Moreover, as described on pages 3.3-41 of the Draft EIR, residences are proposed as part of the Project, which are considered traditional sensitive receptors. However, no residences would be located within 500 feet of a freeway, urban road with 100,000 vehicles/day or more, or a rural road with 50,000 vehicles/day or more. Additionally, under CEQA, an EIR need not analyze the impacts of the existing environment on the Project.

In conclusion, there are virtually no residual TAC emissions and corresponding elevated cancer risk anticipated after Project construction. The proposed Project is not anticipated to generate any notable long-term, operational sources of TAC emissions because the proposed Project would only include residential uses and public open space. The Project would not include heavy industrial uses or other land uses typically associated with stationary sources of TACs.

It should be noted that the mobile vehicles generated by the Project during operation would generate ultrafine particles (UFPs) through vehicle emissions, braking, and tire wear. Like PM in general, (though generating even higher risk per unit than larger particle sizes) UFPs are notable for their potential to generate chronic risks associated with cardiovascular disease, potential long-term loss of lung function, and cancer. According to a recent study prepared for the European Geosciences Union, UFPs vary widely as a proportion of PM overall, depending on location; specifically, the $PM_{0.1}$ to $PM_{2.5}$ ratio analyzed in approximately 39 cities in the United States varied from approximately 1% to 16%.¹ These factors vary so widely because the sources of $PM_{0.1}$ vary substantially from city to city. For example, cities that are located close to substantial sources of natural gas combustion have higher $PM_{0.1}$ to $PM_{2.5}$ ratios, since almost all the PM emitted by natural gas combustion is in the $PM_{0.1}$ size fraction, whereas this is only true for less than half of the PM emitted by gasoline and diesel fuel combustion. Taken together, these facts support the potential importance of natural gas combustion for ambient $PM_{0.1}$ concentrations.

¹ Venecek, M. A., Yu, X., and Kleeman, M. J.: Predicted ultrafine particulate matter source contribution across the continental United States during summertime air pollution events, *Atmos. Chem. Phys.*, 19, 9399–9412, <https://doi.org/10.5194/acp-19-9399-2019>, 2019.

The city analyzed in the study with the greatest similarity to the City of Stockton (i.e. where the Project is located) was the City of Bakersfield, given its similarity in location within the Central Valley region. The ratio of $PM_{0.1}$ to $PM_{2.5}$ for Bakersfield was found to be approximately 11 percent. Absent data specific to the City of Stockton, this data is presumed to be the best available data and reasonable for use in estimating $PM_{0.1}$ levels in this case. Therefore, given the Project's estimated 3.5 tons per year of $PM_{2.5}$ (see Table 3.3-10), the total $PM_{0.1}$ generated by the Project is estimated to be approximately 0.39 tons per year (780 lbs/year). This is equivalent to 2.14 lbs/day of $PM_{0.1}$. While there is not specifically a quantitative threshold of significance established by the SJVAPCD for $PM_{0.1}$, the quantity estimated is considered small relative to thresholds established for other particulate matter. From an incremental health perspective, this level of UFPs generated by the Project would not be substantial. As such, the Project would not result in substantial UFP emissions that may affect nearby receptors.

Response E-5: The proposed Project would not exceed 100 pounds per day of emissions, contrary to the commentor's claim. See Appendix B (i.e. CalEEMod output) of the Draft EIR for further detail. Also see the errata changes made to Section 3.0 of this FEIR, for additional detail. Therefore, an AAQA would not be required.

Response E-6: The Project proponent will consider utilizing the District's Clean Green Yard Machines program, which provides incentive funding for replacement of existing gas powered lawn and garden equipment. However, it should be noted that, nevertheless, any mandatory requirements in this regard would not be feasible. For a mitigation measure to be feasible, it must be able to be meaningfully monitored and enforced. Utilizing green yard machines would occur during the Project operation by the future residents of the Project; however, for this measure to be a feasible mitigation measure, the City would be required to police the choice of individual project residents indefinitely. The City itself does not have the means to monitor and enforce such activities. Instead, the mitigation measures included within the EIR are based on regulatory and other state requirements, which are enforceable at the state level, as well as other measures that can be monitored and enforced. It should be noted, however, that Mitigation Measure 3.3-5 has been added to the errata, which requires the Project applicant(s) to consider the Air District's Clean Green Yard Machines (CGYM) program, which provides incentive funding for replacement of existing gas powered lawn and garden equipment.

Response E-7: The proposed Project will comply with all applicable SJVAPCD rules and regulations, including those cited by the commentor (as applicable).

Response E-8: The proposed Project will comply with all applicable SJVAPCD rules and regulations, including those cited by the commentor (as applicable), including Rule 9510.

Response E-9: The commentor identifies that SJVAPCD Rule 4002 may be applicable to the proposed Project. The proposed Project will comply with all applicable SJVAPCD rules and regulations, including those cited by the commentor (as applicable).

Response E-10: The proposed Project will comply with all applicable SJVAPCD rules and regulations, including those cited by the commentor (as applicable).

Response E-11: The proposed Project will comply with all applicable SJVAPCD rules and regulations, including those cited by the commentor (as applicable).

Response E-12: The proposed Project will comply with all applicable SJVAPCD rules and regulations, including those cited by the commentor (as applicable).

Response E-13: The proposed Project will comply with all applicable SJVAPCD rules and regulations, including those cited by the commentor (as applicable).

Response E-14: A copy of the SJVAPCD's comments will be provided to the Project proponent.

Response E-15: The commentor provides their contact information. No response to this comment is warranted.



September 30, 2024

Nicole Moore, Contract Planner
 Stockton Community Development Department.
 Via e-mail
 Nicole.Moore.ctr@Stocktonca.gov

Re: Comments on the Draft Environmental Impact Report for the LeBaron Ranch Project

Ms. Moore et al:

The Sierra Club submits the following comments on the Draft Environmental Impact Report (DEIR) for the LeBaron Ranch Project.

Please ensure that all future digital notices regarding this and every other discretionary project that are pending with the City are sent to Eric Parfrey, Sierra Club, at parfrey@sbcglobal.net.

F-1

The 230-acre project proposes 1,217 single family residential units with lot sizes that would range from 3,375 to 6,000 square feet (typical "suburban sprawl" densities), plus a token 194 high density residential units, for a total residential unit count of 1,411 units. The subdivision would house an additional 4,400 residents.

The density of subdivision is not consistent with the City of Stockton's Housing Action Plan under review, which includes the following statements:

Stockton should prioritize infill housing and produce more small, attached, housing units to encourage sustainable homeownership at all income levels. Building condos and townhomes could ease the shortage of for-sale homes and complement the construction

F-2

of market rate and below market rate single-family homes and apartments for a more diverse range of housing options.

F-2
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The DEIR Must be Augmented with New Analysis and Recirculated

In general, we are appalled that this DEIR substantially understates, and fails to fully analyze, the severity and extent of significant project-related effects on air quality, greenhouse gas ("GHG") emissions, public health, transportation, among other issues. The environmental documentation for the Project is thus inadequate as an informational document and violates the minimum standards of adequacy under the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 et seq., and the CEQA "Guidelines," California Code of Regulations, title 14, § 15000 et seq. Moreover, the DEIR identifies virtually no substantial mitigation measures to reduce the Project's impacts, even though such measures are readily available, feasible, and commonly required.

F-3

We will be watching carefully to ensure that the City requires additional analysis and mitigation before this project can move forward.

We believe the subdivision design should be re-worked and that additional work to reduce GHG emissions must be completed through the recirculation of a revised DEIR before the City may proceed. We will strenuously object to any attempt to add significant new analysis and information in the Final EIR at the last minute.

The DEIR's Analysis of the GHG Impacts is Insufficient and the Conclusion that Impacts are Less Than Significant is Unsupported.

The DEIR asserts that the greenhouse gas (GHG) emissions impacts from the Project would be less than significant despite the fact that GHG emissions were quantified and are substantial. The DEIR asserts that because Air District does not have an adopted threshold that has been updated, a simple consistency assessment with relevant plans is sufficient to reach a conclusion of less than significant and ignore the 16,118 metric tons of Project-generated GHG emissions released on an annual basis into the San Joaquin Valley air basin. (Emissions are expressed in annual metric tons of CO₂ equivalent units of measure (i.e., MT CO₂e), based on the global warming potential of the individual pollutants). An additional 3,643 tons would be generated during construction. See DEIR at 3.7-27.

F-4

This conclusory approach does not work. *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109 (“in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect”) dictates that the lead agency can’t simply turn away from the volume of GHG emissions generated by the Project. The Project generates substantial GHG emissions, is not in conformance with the City of Stockton Climate Action Plan, and the DEIR makes no attempt to establish a threshold of significance against which the project can be measured. The lead agency’s responsibility here cannot be ignored.

By ignoring that the Project’s emissions are significant, the DEIR fails to adopt even the most routine mitigation measures to reduce GHG emissions and contribute the Project’s “fair share” of what will be required to achieve long-term climate goals for the State. Since 2010, it has become clear from a scientific perspective that any additional GHG emissions will contribute to a serious and growing climate crisis.¹ Recognizing this reality, in 2018 Governor Brown signed Executive Order 55-18 calling for the state to achieve carbon neutrality as soon as possible and no later than 2045.² Given these facts on the ground, the EIR should establish a net zero threshold for new emissions. See e.g., CARB 2017 Scoping Plan at 101 (“Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.”)³ Not only does the EIR neglect to reference EO 55-18, it also fails to explain why this project should not be judged by a significance threshold requiring no net increase in GHG emissions, since that is the standard necessary to comply with the State’s climate change plans and policies.

As the Supreme Court found in *Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204 (“Newhall Ranch”), new projects—such as this Project—may require a greater level of emission reduction because “[d]esigning new buildings and infrastructure for maximum energy efficiency and renewable energy use is likely to be easier,

F-4
cont’d

¹ Summary for Policymakers (SPM) presents key findings of the Working Group I (WGI) contribution to the Intergovernmental Panel on Climate Change (IPCC): https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

² Executive Order to Achieve Carbon Neutrality: <https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>

³ California’s 2017 Climate Change Scoping Plan: https://www2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf?utm_medium=email&utm_source=govdelivery

and is more likely to occur, than achieving the same savings by retrofitting of older structures and systems.” Newhall Ranch, 62 Cal.4th at 226.

F-4
cont’d

The Project Fails to Meet the GHG Reduction Target in the Stockton CAP

Meanwhile, the DEIR asserts that the Project “is not inconsistent” with the sustainability measures included with the City of Stockton Climate Action Plan (CAP). The CAP includes community and municipal GHG reduction targets, and includes a clearly stated GHG reduction target. Specifically, the CAP states: “the City now proposes approximately 10% below 2005 levels as its GHG reduction goal which would be consistent with the level of reductions needed at the state level to meet the AB 32 goal, compared to statewide 2005 levels.” See City of Stockton CAP⁴ at ES-7.

To comply with CEQA’s dictates and the City of Stockton CAP, the EIR must include an analysis of the project’s per capita GHG emissions and whether it is achieving a 10% reduction from the City’s 2005 baseline. If not, the DEIR must be revised and recirculated to conclude the Project is not in conformance with the CAP and therefore has significant GHG impacts.

F-5

In fact, the DEIR states unequivocally that “As shown in the following tables (Table 3.7-3 and Table 3.7-4), the annual GHG emissions associated with the proposed Project would be approximately 16,118 MT CO₂e under the unmitigated scenario, and 16,103 MT CO₂e under the mitigated scenario (i.e. with implementation of the mitigation measures provided in Section 3.3: Air Quality of the Draft EIR).” This reduction amounts to a miniscule 103 MT CO₂, or a reduction of less than 1%.

Qualitative Analysis of GHG is Not Supported by Factual Evidence

With regard to the qualitative analysis on GHG impacts, the DEIR incorrectly and without supportive evidence asserts the Project would not be inconsistent with the 2022 CARB Scoping Plan. Regardless, the unconvincing conclusion of consistency is based on no substantial evidence.

F-6

For example, the CARB VMT Reduction policies state:

⁴ City of Stockton Climate Action Plan (2014):
https://cms3.revize.com/revize/stockton/Documents/Business/Economic%20Development/Contracts%20&%20Purchasing/BidFlash/Administration%20Services/PUR%2024-030/Climate_Action_Plan_August_2014.pdf

- Reduce or eliminate minimum parking standards
- Implement Complete Streets policies and investments, consistent with general plan circulation element requirements
- Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.
- Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking
- Implement parking transportation demand pricing strategies

The DEIR's inadequate "consistency" response states, with no factual support:

No Conflict. Although this goal is not applicable to an individual residential development project, the Project is implementing neighborhood design improvements such as pedestrian network improvements and traffic calming measures. Furthermore, the proposed Project would enable walkable development. See DEIR at 3.7-28.

The DEIR then offers the following weak justification for the assertion that the GHG impacts are less than significant, again without citing any substantial evidence:

"The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, the SJCOG's 2022 RTP/SCS, and the City of Stockton Climate Action Plan. This would ensure that the proposed Project would be consistent with, and would not impair, the State's carbon neutrality standard by year 2045 as established under AB 1279. The State is making progress toward reducing GHG emissions in key sectors such as transportation, industry, and electricity. Since the Project would be consistent with State GHG Plans, it would not impede the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and of achieving carbon neutrality by 2045. The proposed Project would make a reasonable fair share contribution to the State's GHG reduction goals, by implementing a wide array of Project features that would substantially reduce GHG emissions and therefore, the proposed Project's GHG emissions would be considered to have a less than significant impact." See DEIR at 3.7-35

F-6
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But these conclusory statements provide no evidence showing how a project that adds tens of thousands of tons of GHG emissions every year could be consistent with the goal of reducing GHG emissions 40 percent below 1990 levels by 2030. Moreover, reliance on vague “project features” to support a less-than significant determination is problematic because, unless these features are detailed and clarified as required mitigation, there is no guarantee their implementation will be successful and cannot be considered enforceable mitigation pursuant to CEQA requirement.

F-6
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The EIR Must Incorporate Additional Feasible Mitigation Measures

Because the project’s mitigation measures fail to even come close to meeting a 10% reduction in GHG, numerous additional measures recommended by the San Joaquin Valley Air Pollution Control District and other regulatory agencies must be incorporated into the project. Some of these additional feasible mitigation measures, include, but are not limited to:

- (1) clean fleet and clean construction equipment requirements
- (2) extensive use of on-site solar photovoltaic panels
- (3) installation of electric vehicle charging infrastructure
- (4) Installation of clean residential heating devices such as certified wood burning residential fireplaces and wood stoves, natural gas fireplace inserts, or electric heat pumps.
- (5) encourages the siting of development projects with increased densities in order to reduce vehicle miles traveled (VMT) emissions and improve walkability and transit ridership in the area
- (6) locates development projects with high density near transit, which could promote the use of transit by people traveling to or from the project site. The use of transit could result in a mode shift and therefore could reduce VMT. The project should, at a minimum, include the following design features:
 - A transit station/stop with high-quality, high-frequency bus service located within a 5-10 minute walk (or roughly ¼ mile from stop to edge of development), and/or
 - A rail station located within a 20 minute walk (or roughly ½ mile from station to edge of development)

F-7

- Fast, frequent, and reliable transit service connecting to a high percentage of regional destinations
- Neighborhood designed for walking and cycling encourages development projects to incorporate a greater percentage of smaller units into the design to allow a greater number of families to be accommodated on infill and transit-oriented development sites within a given building footprint and height limit.

(7) promote the use of subsidized/discounted daily or monthly public transit passes. The project may also provide free transfers between all shuttles and transit to participants. These passes can be partially or wholly subsidized by the employer, school, or development.

(8) utilize the following design elements to increase pedestrian access and connectivity:

- Provide continuous sidewalks separated from the roadway by landscaping and on-street parking.
- Provide on and off-site pedestrian facility improvements such as trails linking them to designated pedestrian commuting routes and/or on-site overpasses and wider sidewalks.
- Link cul-de-sacs and dead-end streets to encourage pedestrian and bicycle travel.
- Provide traffic reduction modifications to project roads, such as: narrower streets, speed platforms, bulb-outs and intersection modifications designed to reduce vehicle speeds and to encourage pedestrian and bicycle travel.
- Provide pedestrian access between bus service and major transportation points and to destination points within the project.

(9) create local "light" vehicle networks, such as NEV networks. NEVs are classified in the California Vehicle Code as a "low speed vehicle". They are electric powered and must conform to applicable federal automobile safety standards. NEVs offer an alternative to traditional vehicle trips and can legally be used on roadways with speed limits of 35 MPH or less (unless specifically restricted). They are ideal for short trips up to 30 miles in length. To create an NEV network, the project will need to implement the necessary infrastructure, including NEV parking,

F-7
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charging facilities, striping, signage, and educational tools. NEV routes can be implemented throughout the project and can double as bicycle routes.⁵

F-7
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The City must require this project developer to incorporate these and all other feasible mitigation measures to reduce GHG emissions and VMT.

The Subdivision Must be Redesigned and Reconfigured to Become as Efficient as Possible and to Meet GHG Reduction Goals

In our judgement, perhaps the most effective measures that could be implemented which could also significantly reduce GHG emissions are:

- improve pedestrian and bicycle links within and outside the project site, and
- require the developer to contribute financially to link the project site with high frequency fixed route transit service,

Regarding the first point, as currently designed the layout of the subdivision map does not appear to comply with these specific General Plan policies:

F-8

LU-6.4C. Reduce Vehicle Miles Traveled (VMT) per household by planning new housing in closest proximity to employment centers, improving and funding public transportation and ridesharing, and facilitating more direct routes for pedestrians and bicyclists.

TR-3.2. Require new development and transportation projects to reduce travel demand and greenhouse gas emissions, support electric vehicle charging, and accommodate multi passenger autonomous vehicle travel as much as feasible.

TR-2.2A. Require major new development to incorporate and fund design features to promote safe and comfortable access to transit, such as a circulation network that facilitates efficient and connected bus travel, clear pedestrian and bicycle routes connecting origins and destinations to transit stops, sheltered bus stops, park-and-ride facilities, and highly visible transit information and maps. (emphasis added)

⁵ See San Joaquin Valley Air Pollution Control District, Emission Reduction Clean Air Measures, <https://ww2.valleyair.org/media/ob0pweru/clean-air-measures.pdf>.

For example, the proposed subdivision map (Figs. 2.0-8-A, B) appears to feature numerous separate portions of the site that are accessed by rectangular roads that do not appear to be connected with pedestrian and bike facilities. This is critical without which local residents would not be able to connect with the "wellness" and other sidewalks and bike ways in a direct fashion, but would have to meander around on local streets. Please clarify the rationale for this outdated design.

F-8
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All cul-de-sac type access roads must be reconfigured to allow pedestrian and bike trails to encourage direct access to the wellness and green bike paths.

In addition, the developer should be required to provide a "Safe Route to Schools" plan that specifies how school children may directly walk, bike, use electric scooters or skate boards, to the new LUSD K-8 school (if it is built), as well as to the McNair High School (and under construction City of Stockton library) located south of the project site on West Lane.

The EIR Must Require the Applicant to Link the Project Site with High Frequency Fixed Transit Service

The DEIR includes an existing Transportation Demand Management Mitigation Measure 3.13-1 which states:

The Project applicant shall work with the City of Stockton to implement feasible Transportation Demand Management (TDM) strategies, which would decrease the VMT generated by the Project. Specific potential TDM strategies include, but are not limited to, the following:

F-9

- Provide public transit service, including improving San Joaquin Rapid Transit District (RTD) transit service connecting workers with existing and future residential developments;
- Implement a fair value commuting program or other pricing of vehicle travel and parking;...

Please clarify the details for "a fair value commuting program or other pricing of vehicle travel and parking." Presumably, this would have to be a citywide program, which we are dubious would ever be approved by our Council. Please don't include a measure in this list if it is not a politically viable measure that could be implemented in the short term.

The requirement in Mitigation Measure 3.13-1 to "Provide public transit service, including improving San Joaquin Rapid Transit District (RTD) transit service..." is vague and unenforceable. The measure must be re-written to be much more specific and enforceable as a legal condition of approval. We propose much more specific wording below. If there is an issue of a legal CEQA nexus, the condition may require a separate development or contractual agreement between the developer, the City, and RTD.

This measure is critical because, as the DEIR notes, there is currently no fixed route transit service to the project site. The site is served by a "deviated fixed-route service" that does not directly allow residents of the new community board RTD Hopper buses. The DEIR states that:

"Metro Hopper is a deviated fixed-route service for areas within the Stockton city limits. SJRTD operates 12 Hopper routes... SJRTD operates County Hopper Route 93 along West Lane along the eastern edge of the Project site. This route travels between the Stockton Downtown Transit Center and the Lodi Transit Station. The route operates eight (8) times a day in the northbound direction, and 10 times a day in the southbound direction." DEIR at 3.13-6.

F-9
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A "deviated fixed-route service" does not allow deviation from a very limited number of established stops, with only a deviation of one mile from the fixed route service which requires reservations two days in advance for all Hopper deviations. Hoppers will deviate up to two times per trip.

The current established stop for the Hopper 93 bus that is nearest the project site is at McNair High School, south of the project on West Lane. The bus does not currently stop between McNair High School and the downtown Lodi transit center. The City should require this project to contribute the costs of providing one additional fixed stop along the Hopper route that would serve the new subdivision of 4,400 residents.

The above vague, unenforceable mitigation measure should be re-written as follows:

"The developer shall be required to contribute to the costs of providing one additional fixed stop on West Lane along the Hopper 93 route that would serve the new subdivision. The developer shall be responsible for funding the construction of a transit stop, plus any additional infrastructure that would be required to serve the new subdivision with transit service. In addition, the developer shall negotiate with San Joaquin Rapid Transit District to determine if

there are additional costs required to construct and serve this new stop, e.g., the cost of adding one new bus along the route. If there are additional costs, the developer shall be required to pay a fair share of those additional costs."

F-9
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This or similar text would be in place of the existing measure: "Provide public transit service, including improving San Joaquin Rapid Transit District (RTD) transit service connecting workers with existing and future residential developments."

Transportation Impacts are Significant and More Mitigation Must be Required

The subdivision would generate vehicle miles traveled (VMT) in excess of "significant standards." As shown in Table 3.13-1, under Baseline Year conditions, the proposed Project would generate 20.10 home-based VMT per resident, or a total of 35,749 vehicle miles traveled. (Conveniently, the table does not disclose this latter calculation but only states a citywide difference. This should be rectified in the Final EIR.)

The text notes that "This would be 35 percent above the significance threshold. As a result, the Project is considered to have a significant impact on VMT. Under Cumulative Year conditions, the Project would generate 17.54 home-based VMT per resident. This would be 18 percent above the significance threshold. As a result, the Project is considered to have a significant impact on VMT." DEIR at 3-13.18

F-10

This amount of new traffic would have very dramatic impacts to local air quality. The DEIR states

As shown in Table 3.3-9 and Table 3.3-10, the proposed Project's operational criteria pollutant would exceed the applicable SJVAPCD thresholds of significance for ROG, even after implementation of mitigation measures (see Mitigation Measures 3.3-1 through 3.3-3, below). Therefore, the Project's criteria pollutant emissions would be considered to have a significant and unavoidable impact. Further the analysis of criteria air pollutants is inherently cumulative and impacts also would be cumulatively considerable.

The DEIR notes the obvious impacts of approving another low and medium density subdivision far from the major employment areas of the City: a huge increase in VMT. The DEIR blames this increase not on this and other low density projects approved in the wrong place, but on

the “land use imbalance in the rest of the City and greater San Joaquin County geographic area.” Rather than try to reduce this huge increase in VMT (and GHG and AQ impacts), the DEIR authors throw up their hands and blame poor regional planning that occurred decades ago.

However, the precise effectiveness of specific TDM strategies can be difficult to accurately measure due to several external factors such as types of tenants, employee responses to strategies, and changes to technology. Additionally, it is noted that with the current planned growth and development in the City of Stockton, the City's jobs-housing ratio is expected to increase in 2040, and city-wide home-based work VMT per worker is projected to increase. TDM strategies alone cannot eliminate VMT increases caused by land use imbalance in the rest of the City and greater San Joaquin County geographic area.

F-10
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Based on the status of the City of Stockton's TIAG, even with the implementation of Mitigation Measure 3.13-1, the impact would remain significant and unavoidable when compared to the City of Stockton's VMT goal of reducing average home-based work VMT per worker from 18.56 miles to 15.66 miles. (emphasis added) DEIR at 3.13-21

The pathetic response to these very real issues underscore how important it is for the City to recirculate this EIR and present a new DEIR with more effective mitigation measures.

Potential Impacts to Some Endangered Species Have Not been Studied or Mitigated

The DEIR fails to adequately analyze or mitigate potentially significant impacts to some listed species, such as the threatened Swainson's hawk, burrowing owl, and tricolored blackbird. The DEIR simply repeats the old refrain that coverage of the project under the San Joaquin County Multi-Species Habitat Conservation Plan (SJMSHCP) will automatically reduce any impacts to a less than significant level. This is unacceptable. The project applicant should have performed field surveys for these critical bird species, as was done for other sensitive species and disclosed the status of the land in the SJMSCP. (Maybe surveys were performed and hawks or other species were seen, but the DEIR is silent on this.)

F-11

The DEIR notes that:

"The CNDDDB currently contains records for Swainson's hawk, burrowing owl, and tricolored blackbird in the vicinity of the Project site. In addition to the species described above, common raptors, may nest in or adjacent to the Project site. New sources of noise and light during the construction and operational phases of the project could adversely affect nesters if they located adjacent to the Project site in any given year. Additionally, the proposed Project would eliminate the agricultural areas on the Project site, which serve as potential foraging habitat for birds throughout the year."

F-11
cont'd

Then, the DEIR concludes that "Mitigation Measure 3.4-1 requires participation in the SJMSCP...Mitigation Measure 3.4-1, would ensure that potential impacts to special status birds are reduced to a less than significant level." DEIR at 3-4.32

We must remind you that the City of Stockton is the lead agency for complying with the California Environmental Quality Act (CEQA) for this project, not the SJCOG. In the event the SJCOG does not accept this project for SJMSCP coverage, the biological mitigation measures should explicitly require the developer to perform the protocol surveys now to determine the absence or presence of these bird species and implement the standard mitigation required by the agencies before any grading occurs.

Conclusion

We will be watching carefully to ensure that the City requires additional analysis and mitigation before this project can move forward.

We repeat that we believe the subdivision design should be re-worked and that additional work to reduce GHG emissions must be completed through the recirculation of a revised DEIR before the City may proceed. We will strenuously object to any attempt to add significant new analysis and information in the Final EIR at the last minute.

F-12

Sincerely,

s/s Margo Praus, Chair,

Eric Parfrey, member

Mary Elizabeth M.S., R.E.H.S., Conservation Chair

Delta-Sierra Group, Sierra Club

cc: Robert Swanson, California Attorney General's Office
Stanley Armstrong, California Air Resources Board
Patia Siong and Harout Sagherian, San Joaquin Valley Air Pollution Control
District
Heather Minner and Winter King, Shute, Mihaly, & Weinberger
Aaron Isherwood and Joya Manjur, Sierra Club Environmental Law Program
Stockton City Council
Stockton Planning Commission
SJCOG

Response to Letter F: Sierra Club, Delta-Sierra Group

Response F-1: Any future digital notices regarding this and every discretionary project that are pending with the City will be sent to Eric Parfrey at the Sierra Club.

Response F-2: The City's Housing Element Update is required by state law and outlines the City's housing policies, demographics, and housing capacity sites necessary to fulfill the City's Regional Housing Needs Allocation (RHNA). The Housing Action Plan (HAP), separate from the City's Housing Element, is an original planning document that creates a user manual to encourage housing development of all types in Stockton and will serve as a strategic plan to identify housing priority sites and outline recommendations for further action. It is a "toolkit" to encourage housing production, both affordable and market-rate.

While the Project does not include infill housing or small, attached housing units, the Project, the City's HAP does not prohibit development such as the Project.

The proposed Project is generally consistent with the City's land use vision for the Project site as set forth in the City's General Plan. As noted on page 2.0-3 of Chapter 2.0, Project Description, of the Draft EIR, the Envision Stockton 2040 General Plan Land Use Map (Figure 2.0-5) designates the Project site as Low Density Residential, Medium Density Residential, High Density Residential, Institutional, and Parks and Recreation. Table 2.0-2 provides an existing land use summary of the Development Area per the 2040 Stockton General Plan. It is noted that the proposed Project would require a City of Stockton General Plan Amendment to the Land Use Element to change land uses on the Project site. However, changes to the General Plan Land Use Map are largely a reorganization of the precise locations for each land use within the boundary of the Project site as opposed to land use changes. Figures 2.0-6-A and 2.0-6-B illustrate the proposed Stockton General Plan land uses with and without the school site.

Table 2.0-4 summarizes the existing and proposed land use designations. As shown in Table 2.0-4 on page 2.0-10, the proposed Project would result in a 48.4-acre decrease in Low Density Residential uses, a 49.7-acre increase in Medium Density Residential uses, and a decrease of 9.9-acres of High Density Residential uses. As such, by substantially increasing the amount of Medium Density Residential units on the Project site, the proposed Project would increase the amount and range of smaller lot sizes, when compared to the City's land use vision for the Project site as set forth in the City's General Plan.

Response F-3: The commenter's letter is fully addressed in this Final EIR. For detailed responses regarding the air quality, greenhouse gas (GHG), transportation, public health, and other issues raised by the commenter, see Responses F-4 through F-11. Minor changes and clarifications have been made to the Draft EIR text in response to two comment letters received, including letter F. However, the revisions herein do not result in new significant environmental impacts, do not constitute significant new information, nor do they alter the conclusions of the environmental analysis that would warrant recirculation of the Draft EIR pursuant to State CEQA Guidelines Section 15088.5. The Draft EIR is adequate

as an informational document and includes mitigation measures for potentially significant impacts that aim to reduce impacts to the extent feasible.

Response F-4: As stated on page 3.7-25 of the Draft EIR, the vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For individual proposed projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The City of Stockton does have a formal GHG emissions reduction plan, in the form of the City of Stockton Climate Action Plan (CAP) (2014). However, it should be noted that this CAP is not considered a Qualified GHG Reduction Plan.

The Supreme Court's decision in *Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204 ("Newhall Ranch") determined that comparative analysis of GHG emissions could be applicable based on local or regional data of the project location. However, the court did not specify in detail what kind of comparative (quantitative) analysis would be considered adequate. An alternative way to satisfy the greenhouse gas requirements is to rely on a locally qualified CAP if it is adequately supported.

More recently, in the *Golden Door Properties, LLC v. County of San Diego* ("Golden Door") case, the court indicated that, in order for a use of a quantitative threshold for GHGs to be applicable, the quantitative threshold must to be adopted by the City via resolution, ordinance, or regulation, needs to undergo include a public review process, and must to be supported by substantial evidence. Although the City of Stockton CAP included a GHG efficiency metric target for year 2020, the City of Stockton has not adopted a quantitative threshold for GHGs for years beyond year 2020 that satisfy these requirements. Therefore, the use of a quantitative threshold to analyze GHGs is not appropriate for the Project.

Rather, the analysis approach utilized is an analysis of the Project's consistency applicable GHG-related plans, policies, and regulations, which represents an appropriate approach to analyzing the potential for the Project to generate significant impacts related to GHGs. This approach was taken in Section 3.7: Greenhouse Gases, Climate Change, and Energy, of the Draft EIR, and is consistent with current case law (including the Newhall Ranch and Golden Door cases). To that end, additional errata text has been added to Table 3.7-7 (now Table 3.7-8), to provide further clarification.

Overall, the analysis provided in Section 3.7: Greenhouse Gases, Climate Change, and Energy, of the Draft EIR provides a qualitative assessment of the Project's compliance with the applicable plans, policies, and regulations for the purposes of reducing greenhouse gas emissions. This analysis determined that the proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS. Consistency with the City of Stockton Climate Action Plan is provided for information purposes only. This would ensure that the proposed Project would be consistent with, and would not impair, the State's carbon neutrality standard by year 2045 as established under AB 1279. Separately, disclosure of the Project's estimated construction and operation-related GHG emissions are provided for the purposes of disclosure. This approach does not ignore the volume of GHG emissions generated by the project; instead, the Project's emissions are disclosed and the Project is evaluated based on its consistency with the applicable plans, policies, and regulations that are in place and have been designed to ensure that the Project would not generate significant GHG emissions.

Moreover, with the included analysis of the Project's consistency with the 2022 Scoping Plan, the Draft EIR addresses whether the project is consistent with AB 1279, since the 2022 Scoping Plan has been designed consistent with the requirements of AB 1279, including the requirement to achieving carbon neutrality as soon as possible, but no later than 2045, and maintaining net negative GHG emissions thereafter, as well as to ensure that California reduces GHG emissions to 85 percent below 1990 levels by 2045. As provided in the Draft EIR, the Project would be consistent with the 2022 Scoping Plan, and would thereby be consistent with the requirements of AB 1279. No further response to this comment is warranted.

Response F-5: Table 3.3-7 (now Table 3.7-8 within the errata) in Section 3.7 of the Draft EIR provides an analysis of the consistency of the proposed Project with the GHG reduction measures contained within the City's CAP, for informational purposes. To that end, additional errata text has been added to Table 3.7-7 (now Table 3.7-8 within the errata).

Moreover, as described in Response F-4, the Supreme Court's decision in *Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204 ("Newhall Ranch") determined that comparative analysis of GHG emissions could be applicable based on local or regional data of the project location. However, the court did not specify in detail what kind of comparative (quantitative) analysis would be considered adequate. An alternative way to satisfy the greenhouse gas requirements is to rely on a locally qualified CAP if it is adequately supported. More recently, in the *Golden Door Properties, LLC v. County of San Diego* ("Golden Door") case, the court indicated that, in order for a use of a quantitative threshold for GHGs to be applicable, the quantitative threshold must be adopted by the City via resolution, ordinance, or regulation, needs to undergo include a public review process, and must to be supported by substantial evidence. Although the City of Stockton Climate Action Plan (2014) includes a year 2020 quantitative threshold for GHGs, which did undergo such a process, it only applies to year 2020, which has

already come and gone. The City of Stockton has not adopted a quantitative threshold for any relevant future years for GHGs that satisfy these requirements. Therefore, the use of a quantitative threshold to analyze GHGs is not appropriate for the Project (it should be noted that errata text has been added within the local setting, under the “City of Stockton Climate Action Plan” header, to further describe why this is the case).

Rather, the analysis approach utilized is an analysis of the Project’s consistency with the applicable GHG-related plans, policies, and regulations, which represents an appropriate approach to analyzing the potential for the Project to generate significant impacts related to GHGs. This approach was taken in Section 3.7, Greenhouse Gases, Climate Change, and Energy, of the Draft EIR, and is consistent with current case law (including the Newhall Ranch and Golden Door cases).

Overall, the analysis provided in Section 3.7, Greenhouse Gases, Climate Change, and Energy, of the Draft EIR provides a qualitative assessment of the Project’s compliance with the applicable plans, policies, and regulations for the purposes of reducing greenhouse gas emissions. This analysis determined that the proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the California Air Resources Board (CARB) Scoping Plan, the San Joaquin Council of Governments (SJCOG) 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and the City of Stockton CAP. This would ensure that the proposed Project would be consistent with, and would not impair, the State’s carbon neutrality standard by year 2045 as established under AB 1279. Separately, disclosure of the Project’s estimated construction and operation-related GHG emissions are provided for the purposes of disclosure. This approach does not ignore the volume of GHG emissions generated by the project; instead, the Project’s emissions are disclosed and the Project is evaluated based on its consistency with the applicable plans, policies, and regulations that are in place and have been designed to ensure that the Project would not generate significant GHG emissions. Additional errata text has also been added to Section 3.7: Greenhouse Gases, Climate Change, and Energy, of the Draft EIR, including a new table summarizing the statewide GHG reduction strategies that apply to the Project, to provide additional disclosure.

Moreover, with the included analysis of the Project’s consistency with the 2022 Scoping Plan, the Draft EIR addresses whether the project is consistent with future statewide GHG reduction targets, including AB 1279, since the 2022 Scoping Plan has been designed consistent with the requirements of AB 1279, including the requirement to achieving carbon neutrality as soon as possible, but no later than 2045, and maintaining net negative GHG emissions thereafter, as well as to ensure that California reduces GHG emissions to 85 percent below 1990 levels by 2045. As provided in the Draft EIR, the Project would be consistent with the 2022 Scoping Plan, and would thereby be consistent with the requirements of future statewide GHG reduction targets, including AB 1279.

Response F-6: As stated on page 3.7-25 of the Draft EIR, the vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct

influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

Overall, the analysis provided in Section 3.7, Greenhouse Gases, Climate Change, and Energy, of the Draft EIR provides a factually based and appropriate assessment of the Project's compliance with the applicable plans, policies, and regulations for the purposes of reducing greenhouse gas emissions, to evaluate whether Project implementation would or would not generate GHGs that have a significant impact on the environment. Ultimately, statewide policies are largely responsible for ensuring that the state achieves its long-term GHG emissions goals. This analysis determined that the proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS, thus ensuring that the Project would not generate GHGs that have a significant impact on the environment.

For example, Table 3.7-5 (now Table 3.7-6, within the errata) demonstrates that the Project would be consistent with the 2022 Scoping Plan, since it would not conflict with the applicable 2022 Scoping Plan policies included within the plan, in order to ensure consistency with the AB 1279 GHG reduction targets of achieving carbon neutrality by 2045, and reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. The proposed Project's operational emissions would be further reduced as regulations are implemented by the CARB and other State agencies to comply with the statewide GHG reduction targets. Many of these regulations are already identified in the 2022 Scoping Plan. Similarly, Table 3.7-6 (now Table 3.7-7 within the errata) demonstrates how the Project would not conflict with SJCOG's 2022 RTP/SCS. Furthermore, Table 3.7-7 (now Table 3.7-8, within the errata) describes how the Project would not conflict with the Stockton Climate Action Plan.

This would ensure that the proposed Project would be consistent with, and would not impair, the State's carbon neutrality standard by year 2045 as established under AB 1279. Separately, disclosure of the Project's estimated construction and operation-related GHG emissions are provided for the purposes of disclosure. This approach does not ignore the volume of GHG emissions generated by the project; instead, the Project's emissions are disclosed and the Project is evaluated based on its consistency with the applicable plans, policies, and regulations that are in place and have been designed to ensure that the Project would not generate significant GHG emissions.

It is also noted that the Project includes development of bicycle and pedestrian facilities throughout the Project site. For example, the proposed Project will provide both standard sidewalks, and as part of specific project roadways, enhanced sidewalks (also referred to as "wellness walks") throughout the development, along with bike lanes along the major

arterials that the proposed Project fronts to offer additional bicycling and walking facilities for all of Stockton's residents. Class IV bikeways (separated bikeways) will be provided along the major arterials that border the Project site; which includes Lower Sacramento Road, West Lane and Eight Mile Road. The Eight Mile Road cross section shows both a Class IV bikeway on Eight Mile Road and a Class I bike path between the proposed Project and the Woodbridge Irrigation Ditch (see Figure 2.0-9 illustrating bikeways in the green area of the roadway cross section). The Eight Mile Road cross section shows both a Class IV bikeway and Class I bike path. The Class I path is in the green area and Class IV is to the left of the sidewalk. The illustration shows a raised curb/divider next to right turn lane. Further, Mitigation Measure 3.13-1 requires the applicant to work with the City of Stockton to implement feasible Transportation Demand Management (TDM) strategies, which would decrease the VMT generated by the Project

As noted on page 3.13-6 of Section 3.13 of the Draft EIR, SJRTD operates County Hopper Route 93 along West Lane along the eastern edge of the Project site. This route travels between the Stockton Downtown Transit Center and the Lodi Transit Station. The route operates eight (8) times a day in the northbound direction, and 10 times a day in the southbound direction.

The commenter's suggestion to reduce parking standards is a City planning and policy measure and would not be effective for the proposed project. This is because such a measure is ineffective in locations where unrestricted street parking or other offsite parking is available nearby and has adequate capacity to accommodate project-related vehicle parking demand, which is the case for the area around the proposed Project.² Further, according to the LeBaron Ranch VMT Assessment (WK Shijo Consulting, LLC, 2023) parking pricing strategies are typically recommended for commercial projects, not residential projects such as the proposed Project.³ This is, in part, because, when limiting parking supply, a best practice is to do so at sites that are located near high quality alternative modes of travel (such as a rail station, frequent bus line, or in a higher density area with multiple walkable locations nearby).⁴ However, there would not be sufficient high quality nearby alternative modes of transportation would be available to serve the proposed Project, should parking pricing strategies be implemented. For limiting residential parking supply, the GHG Handbook notes, "This measure is ineffective in locations where unrestricted street parking or other offsite parking is available nearby and has adequate capacity to accommodate project-related vehicle parking demand."

² Refer to Measure T-15: Limit Residential Parking Supply, in CAPCOA's GHG Handbook. Available at: <https://www.caleemod.com/handbook/index.html>

³ Refer to Measure T-24: Implement Market Price Public Parking, in CAPCOA's GHG Handbook. Available at: <https://www.caleemod.com/handbook/index.html>

⁴ Refer to Measure T-15: Limit Residential Parking Supply, in CAPCOA's GHG Handbook. Available at: <https://www.caleemod.com/handbook/index.html>

As noted above, the Project would implement Complete Streets, consistent with existing City policies and standards. See Figures 2.09-a through 2.09-d of the Draft EIR for the street cross sections.

Mitigation Measure 3.13-1 requires coordination with public transit agencies regarding transit service connecting workers with existing and future residential developments, and also requires coordination with SJRTD regarding the potential for increasing service on Hopper Route 93. As such, this measure aims to increase access to public transit, as suggested by the commenter.

Response F-7: Mitigation measures for GHG impacts are not required or appropriate, since the proposed Project would have a ‘less than significant’ impact associated with GHG impacts (as provided in Section 3.7, Greenhouse Gases, Climate Change, and Energy of the Draft EIR). As described under Comment Response F-4, for individual proposed projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The City of Stockton does have a formal GHG emissions reduction plan, in the form of the City of Stockton CAP (2014). The Supreme Court’s decision in *Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204 (“Newhall Ranch”) determined that comparative analysis of GHG emissions could be applicable based on local or regional data of the project location. However, the court did not specify in detail what kind of comparative (quantitative) analysis would be considered adequate. Moreover, the City of Stockton CAP is not considered a Qualified GHG Reduction Plan, for the purposes of CEQA. An alternative way to satisfy the greenhouse gas requirements is to rely on a locally qualified CAP if it is adequately supported. More recently, in the *Golden Door Properties, LLC v. County of San Diego* (“Golden Door”) case, the court indicated that, in order for a use of a quantitative threshold for GHGs to be applicable, the quantitative threshold must be adopted by the City via resolution, ordinance, or regulation, needs to undergo include a public review process, and must to be supported by substantial evidence. Although the City of Stockton CAP did include an efficiency target for year 2020, it did not include any efficiency targets for years after year 2020, and year 2020 has come and gone. Therefore, the City of Stockton has not adopted a quantitative threshold for GHGs that satisfy these requirements. Therefore, the use of a quantitative threshold to analyze GHGs is not appropriate for the Project.

Rather, the analysis approach utilized is an analysis of the Project’s consistency with the applicable GHG-related plans, policies, and regulations, which represents an appropriate approach to analyzing the potential for the Project to generate significant impacts related to GHGs. This approach was taken in Section 3.7, Greenhouse Gases, Climate Change, and Energy, of the Draft EIR, and is consistent with current case law (including the Newhall Ranch and Golden Door cases).

Overall, the analysis provided in Section 3.7, Greenhouse Gases, Climate Change, and Energy, of the Draft EIR provides a qualitative assessment of the Project’s compliance with the applicable plans, policies, and regulations for the purposes of reducing greenhouse

gas emissions. This analysis determined that the proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS. This would ensure that the proposed Project would be consistent with, and would not impair, the State's carbon neutrality standard by year 2045 as established under AB 1279. Separately, disclosure of the Project's estimated construction and operation-related GHG emissions are provided for the purposes of disclosure. Therefore, neither a specific quantitative reduction in GHG emissions associated with the Project, nor implementation of mitigation measures for GHG emissions, are required. Additional errata text has been added throughout 3.7, Greenhouse Gases, Climate Change, and Energy of the Draft EIR, where appropriate, to describe this in further detail. No further response to this comment is warranted.

Response F-8: While this comment is noted, this comment does not relate to CEQA. The proposed Project is required to be consistent with the General Plan, including the General Plan actions cited by the commentor. A General Plan policy consistency analysis is provided in Table 3.10-3 of Section 3.10 of the Draft EIR. As noted in Response F-6 and further described in various responses in Table 3.10-3, the Project includes development of bicycle and pedestrian facilities throughout the Project site which provide clear pedestrian and bicycle routes connecting the Project site to adjacent off-site developments.

The proposed onsite improvements would satisfy the City's Complete Streets standards. The Project includes an extension of the west-east trending Marlette Road that will provide several access points to the proposed development, and connect to West Lane and Lower Sacramento Road. West Lane and Lower Sacramento Road are the main arterial roadways providing access to the Development Area. The proposed Project includes annexation of right-of-way along Eight Mile Road, which will be improved to City of Stockton standards; however, access to the proposed development will not occur from Eight Mile Road, thus eliminating any conflicts with the flow of traffic on Eight Mile Road. Project traffic will be directed to Marlette Road, except for one direct access point to West Lane, and then directed east or west along Marlette Road to West Lane and Lower Sacramento Road. These proposed improvements, as well as the proposed "wellness walk", could be used by school-aged residents to get to and from nearby schools (including McNair High School).

Nothing cited by the commentor provides sufficient evidence that the Project would not comply with the General Plan policies cited by the commentor, or any other General Plan policies. Therefore, redesign and/or reconfiguration of the Project site is not warranted.

See Responses F-6 and F-9 regarding VMT reduction and transit.

Response F-9: Public transit is an important component of measures to vehicle miles traveled (VMT). However, public transit is only one facet of a broader overall approach to reducing VMT. To reduce VMT, it is important to consider and apply a broad and flexible range of

measures, selecting measures most effective to the individual site and set of users. As noted in Responses F-6 and F-8, the Project includes development of bicycle and pedestrian facilities throughout the Project site in order to encourage non-automobile methods of travel and, thus, reduce VMT.

Mitigation Measure 3.13-1 as presented in the Draft EIR provides for consideration of a broader range of measures to reduce VMT. Because of the need to consider a broad range of measures, the overall structure of Mitigation Measure 3.13-1 has been retained in the EIR. Mitigation Measure 3.13-1 includes the following specific transportation demand management (TDM) strategy: “Implement a fair value commuting program or other pricing of vehicle travel and parking”. Further consideration was given to the feasibility of vehicle travel and parking pricing strategies. As noted by the commenter, this would have to be a citywide program, which is not under the control of the applicant. Further, according to the LeBaron Ranch VMT Assessment (WK Shijo Consulting, LLC, 2023) parking pricing strategies are typically recommended for commercial projects, not residential projects such as the proposed Project.⁵ Based on this further consideration, this strategy was determined to be not feasible. Because of this, as suggested by the commenter, this strategy has been deleted from Mitigation Measure 3.13-1. Additionally, language has been included in the analysis in Section 3.13 to clarify Mitigation Measure 3.13-1; refer to Section 3.0 of this Final EIR.

The commenter provides specific language for re-writing Mitigation Measure 3.13-1. The language provided by the commenter is related to Hopper Route 93, which is operated by San Joaquin Regional Transit District (RTD). The commenter states Mitigation Measure 3.13-1 should be re-written to require the developer to contribute to the costs of one additional fixed stop on West Lane, plus additional infrastructure, and require the developer to negotiate with San Joaquin RTD to determine additional costs for the new stop, including the cost of one new bus.

Compliance with the measure, as proposed by the commenter would require the cooperation and active participation of San Joaquin RTD. This would include requiring San Joaquin RTD to: (1) agree to an additional stop on West Lane, (2) identify specific infrastructure needed for the additional stop, and (3) specify the type of vehicle that would be needed to serve the additional stop. San Joaquin RTD funding would also be required.

While the City, as the lead agency, has the authority to require some actions by the developer, the City does not have the authority to require another agency (in this case the San Joaquin RTD) to mitigate Project impacts. The City can encourage and support additional public transit serving the Project site, and provide infrastructure for a new bus stop. But the City cannot require San Joaquin RTD to add a bus stop. Because compliance with the measure as proposed by the commenter would require the cooperation and

⁵ Refer to Measure T-24: Implement Market Price Public Parking, in CAPCOA’s GHG Handbook. Available at: <https://www.caleemod.com/handbook/index.html>

active participation of San Joaquin RTD, the measure as proposed by the commenter is considered infeasible.

In response to the commenter, Mitigation Measure 3.13-1 has been modified to specifically address increasing service on Hopper Route 93. See Chapter 3.0, Revisions, of this Final EIR for the change in strike through and underline format.

Response F-10: The commenter refers to a calculated change of 35,749 VMT, and notes the table does not present the calculated change. In making this comment, it appears the commenter is referring to Table 3.13-2 in Section 3.13 of the Draft EIR. Table 3.13-2 does not present the amount of change in VMT because the applicable significance threshold is based on whether the Project would result in an increase in VMT. The significance threshold is not based on the quantity of the change in VMT, but that the proposed Project would generate 15 percent below the average VMT per resident in the City.

While the quantity of change in VMT does not affect the significance of the impact, the following revised version of Table 3.13-2 shows the quantity of change referred to by the commenter, for better clarity. See Chapter 3.0, Revisions, of this Final EIR for the change in strike through and underline format.

TABLE 3.13-2: VMT ANALYSIS – CITYWIDE TOTAL VMT

SCENARIO	NO PROJECT	WITH PROJECT	<u>PROJECT-RELATED CHANGE</u>	WITH PROJECT VMT GREATER THAN NO PROJECT VMT?
Baseline Year Before Mitigation	5,184,549	5,220,298	<u>35,749</u>	Yes
Baseline Year With Mitigation	-	5,215,729	<u>31,180</u>	Yes
Cumulative Year Before Mitigation	6,597,410	6,636,505	<u>39,095</u>	Yes
Cumulative Year With Mitigation	-	6,632,517	<u>35,107</u>	Yes

As cited by the commenter, the Draft EIR discloses the impact of the Project on reactive organic gas (ROG) emissions and presents mitigation measures to reduce the impact. As described in the Draft EIR, even with implementation of the mitigation measures, the impact of the Project on ROG emissions would be significant and unavoidable.

The commenter states, “The DEIR blames this increase not on this and other low density projects approved in in (sic) the wrong place, but on ‘land use imbalance in the rest of the City and greater San Joaquin County geographic area.’ Rather than try to reduce this huge increase in VMT (and GHG and AQ impacts), the DEIR authors throw up their hands and blame poor regional planning that occurred decades ago.”

The Draft EIR is an informational document to disclose the potential environmental impacts of the Project for decision-makers. The Draft EIR fully discloses impacts of the Project on VMT and air quality, describes the sources of the impacts, and presents feasible mitigation measures. In those cases where an impact is project-related, the Draft EIR discloses the impact. In those cases where an effect is not due to the Project, the Draft EIR explains the source of the effect.

As cited by the commenter, the Draft EIR discloses that the impact of the Project on VMT would be significant and unavoidable. The commenter refers to Mitigation Measure 3.13-1 as a “pathetic response”. The Draft EIR fully discloses the impact of the Project on VMT and presents feasible mitigation measures and project design features to reduce the significance of the impact. See Response F-9 regarding the feasibility of various TDM measures. The quantitative assessment presented in the Draft EIR objectively concludes that, even with implementation of the mitigation measures and project design features, the impact would be significant and unavoidable.

It is noted that text additions and clarifications have been made to Section 3.13 of the Draft EIR. See Chapter 3.0, Revisions, of this Final EIR.

Response F-11: Swainson’s hawk, burrowing owl, and tricolored blackbird are discussed on pages 3.4-15, 3.4-16, 3.4-31, and 3.4-32 of Section 3.4, Biological Resource, of the Draft EIR. Additionally, as discussed on page 3.4-3 of the Draft EIR, field surveys were conducted by Principal Biologist Steve McMurtry on April 22, 2022, and May 15, 2023. The site reconnaissance surveys served several purposes. First, they served as reconnaissance of the site to establish the existing conditions of the site and to verify information gathered in the pre-field investigation. This included identification of the habitat types, hydrologic features, topography, soil characteristics, and vegetation. The field investigations followed the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2009). Habitat was recorded. Visibility during each survey was excellent. Swainson’s hawk, burrowing owl, and tricolored blackbird were not observed during the surveys.

Additionally, as noted on pages 3.4-31 and 3.4-32 of the Draft EIR, Powerlines and trees located in the region represent potentially suitable nesting habitat for a variety of special-status birds. Additionally, the agricultural land represents potentially suitable nesting habitat for some ground-nesting birds. In general, most nesting occurs from late February and early March through late July and early August, depending on various environmental conditions. As noted by the commenter, and as stated in the Draft EIR, the CNDDDB currently contains records for Swainson's hawk, burrowing owl, and tricolored blackbird in the vicinity of the Project site. In addition to the species described above, common raptors, may nest in or adjacent to the Project site.

These three bird species are all covered species under the San Joaquin County Multi-Species Habitat Conservation Plan (SJMSCP). Mitigation Measure 3.4-1 requires the applicant to seek coverage under the SJMSCP, which would involve compensation for habitat impacts on covered species through implementation of incidental take and minimization measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Additionally, as part of the SJMSCP, SJCOG requires preconstruction surveys for projects that initiate grading activities during the avian breeding season (March 1 – August 31). When active nests are

identified, the biologists develop buffer zones around the active nests as deemed appropriate until the young have fledged.

Project applicants have four options to receive Coverage, with approval by SJCOG, Inc.:

1. Pay the appropriate fee. A fee is assessed depending on which of the four habitats the project lies within.
2. Dedicate habitat lands as conservation easement or fee title.
3. Purchase mitigation bank credits from a mitigation bank approved by SJMSCP.
4. Propose an alternative mitigation plan, consistent with the goals of the SJMSCP and equivalent in biological value.

There is no reason to believe that the Project would not receive coverage under the SJMSCP under at least one of these options. Further, the California Department of Fish and Wildlife submitted a Draft EIR comment letter (Letter A in this chapter); their letter did not indicate that additional mitigation for this species should be provided.

Response F-12: For detailed responses to the commenter's concerns provided in this comment, please see Responses F-1 through F-11.

This section includes minor edits and changes to the Draft EIR. These modifications resulted from responses to comments received during the public review period for the Draft EIR, as well as City staff-initiated edits to clarify the details of the project.

Revisions herein do not result in new significant environmental impacts, do not constitute significant new information, nor do they alter the conclusions of the environmental analysis that would warrant recirculation of the Draft EIR pursuant to State CEQA Guidelines Section 15088.5.

Other minor changes to various sections of the Draft EIR are also shown below. These changes are provided in revision marks with underline for new text and ~~strike out for deleted text~~.

3.1 REVISIONS TO THE DRAFT EIR

0.0 EXECUTIVE SUMMARY

The following changes were made to pages ES-3 and ES-4 of Chapter ES of the Draft EIR:

TABLE ES-1: COMPARISON SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	NO PROJECT (NO BUILD) ALTERNATIVE	REDUCED DENSITY ALTERNATIVE	AGRICULTURE PROTECTION ALTERNATIVE
Aesthetics and Visual Resources	Less (Best)	Slightly Less (3rd Best)	Less (2nd Best)
Agricultural Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Air Quality	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Biological Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Cultural and Tribal Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Geology and Soils	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Greenhouse Gases, Climate Change and Energy	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Hazards and Hazardous Materials	Less (Best)	Equal (2nd-3rd Best)	Equal Slightly Less (2nd Best)
Hydrology and Water Quality	Less (Best)	Slightly Less (3rd Best)	Less (2nd Best)
Land Use and Population	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Noise	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Public Services and Recreation	Less (Best)	Equal (2nd Best)	Equal (3rd Best)
Transportation and Circulation	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Utilities	Less (Best)	Less (2nd Best)	Equal (3rd Best)

GREATER = GREATER IMPACT THAN THAT OF THE PROPOSED PROJECT

LESS = LESS IMPACT THAN THAT OF THE PROPOSED PROJECT

EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE PROPOSED PROJECT

As shown in the table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project (No Build) Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. Therefore, the Reduced Density Alternative and Agriculture Protection Alternative both rank higher than the proposed Project. The Reduced Density Alternative would have equal impacts in five areas, slightly less impacts in five areas, and less impacts in nine areas. The Agriculture Protection Alternative would have equal impacts in ~~nine~~ eight areas, slightly less impacts in one area, and less impacts in five areas. Therefore, the Reduced Density Alternative would be the next environmentally superior alternative. It is noted that neither the Agriculture Protection Alternative nor the Reduced Density Alternative fully meet all of the Project objectives. See Section 5.4 below for a comparative evaluation of the objectives for each alternative.

The following changes were made to pages ES-5 through ES-12 of Chapter ES of the Draft EIR:

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
AESTHETICS AND VISUAL RESOURCES			
Impact 3.1-1: Project implementation may result in substantial adverse effects on scenic vistas and resources or substantial degradation of visual character	SU	<i>None feasible.</i>	SU
Impact 3.1-2: Project implementation would not substantially damage scenic resources within a State Scenic Highway	NI	<i>None required.</i>	--
Impact 3.1-3: Project implementation may result in light and glare impacts	LS	<i>None required.</i>	--
AGRICULTURAL RESOURCES			
Impact 3.2-1: The proposed Project would result in the conversion of Farmlands, including Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses	PS	<p><i>Mitigation Measure 3.2-1:</i> <i>Prior to the conversion of Important Farmland on the Project site, the Project applicant shall participate in the City's Agricultural Lands Mitigation Program, under which developers of the property shall contribute agricultural mitigation land or shall pay the Agricultural Land Mitigation Fee to the City- on a 1:1 basis for each acre of land converted. The Agricultural Land Mitigation Program provides that <u>agricultural mitigation lands shall be dedicated to a qualifying management entity such as the Central Valley Farmland Trust. The fees shall be collected by the City, held in a dedicated account, and then expended by the City to acquire agricultural mitigation land or pay for the monitoring and administrative costs of the program. The fees may also be transferred to a qualifying entity for the same purpose. Payment in the in the City's Agricultural Lands Mitigation Program would be feasible or effective mitigation for conversion of agricultural land.</u></i></p> <p>Participation <i>Alternatively, participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) that results in agricultural land mitigation may also be considered as the functional equivalent of mitigation for the loss of Important Farmland. The SJMSCP requires the payment of a per-acre fee for loss of wildlife habitat, which in San Joaquin County is largely integral with agricultural use. One important use of the fees is the acquisition of conservation easements over agricultural land that are intended to preserve the agricultural use of these lands in order to maintain their biological habitat values.</i></p>	SU

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
Impact 3.2-2: The proposed Project would conflict with existing zoning for agricultural use, or Williamson Act contracts	PS	<i>None feasible.</i>	SU
Impact 3.2-3: The proposed Project may involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use	LS	<i>None required.</i>	--
AIR QUALITY			
Impact 3.3-1: Project operation has the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan	PS	<p>Mitigation Measure 3.3-1: The project <u>Project applicant(s)</u> shall comply with SJVAPCD Rule 4101, which prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants. <u>Specifically, the project applicant(s), during Project operation, shall not discharge into the atmosphere any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than (3) minutes in any one (1) hour which is: a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; b) Of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of this rule.</u></p> <p>Mitigation Measure 3.3-2: The project <u>Project applicant(s)</u> shall comply with SJVAPCD Rule 4601, during Project construction and operation, which limits project has agreed to abide by more <u>limits stringent</u> VOC emissions requirements from architectural coatings. This rule specifies Emissions of volatile organic compounds from architectural coatings by specifying storage, clean up and labeling requirements. Specific VOC limits for architectural coatings are provided within the Air District's website, located at: https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations/ (The project has agreed to abide by more stringent VOC emissions requirements.)</p> <p>Mitigation Measure 3.3-3: The project <u>Project applicant(s)</u> shall utilize low-VOC paints, equivalent to 10 g/L of ROG, if commercially available.</p> <p>Mitigation Measure 3.3-4: <u>The City shall educate the Project applicant(s) on the benefits of a VERA. The Project applicant(s) shall consult with the City regarding the results of SJVAPCD's Rule 9510 process, prior the building permit stage. If emissions reductions</u></p>	SU

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><u>associated with mandatory compliance with SJVAPCD's Rule 9510 are not sufficient to reduce emissions to below the applicable SJVAPCD thresholds of significance for operational ROG, the project applicant shall enter into a VERA with the SJVAPCD, to reduce emissions to below the applicable thresholds of significance, after taking into account any emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510. If conditions warrant participation in a VERA, the VERA shall demonstrate a reduction in emissions that meets SJVAPCD's ROG operational emissions threshold through a process that funds and implements emissions reduction projects within the SJVAB. The types of emission reduction projects that could be funded include replacing old heavy-duty trucks with cleaner, more efficient heavy-duty trucks, for example. If a VERA is found to be required, the project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level.</u></p> <p><u>Mitigation Measure 3.3-5: The Project applicant(s) shall provide information regarding the Air District's Clean Green Yard Machines (CGYM) program, which provides incentive funding for the replacement of existing gas powered lawn and garden equipment, to the home-buyers at time of sale of the housing units by the applicant. More information on the District CGYM program and funding can be found at: https://ww2.valleyair.org/grants/zero-emission-landscaping-equipment-voucher-program/.</u></p>	
Impact 3.3-2: Proposed Project construction activities would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan	PS	<p>Mitigation Measure 3.3-64: Prior to the issuance of a Grading Permit for each phase of the Project, the Project Proponent shall prepare and submit a Dust Control Plan that meets all of the applicable requirements of APCD Rule 8021, Section 6.3, for the review and approval of the APCD Air Pollution Control Officer.</p> <p>Mitigation Measure 3.3-75: During all construction activities, the Project Proponent shall implement dust control measures, as required by APCD Rules 8011-8081, to limit Visible Dust Emissions to 20% opacity or less. Dust control measures shall include application of water or chemical dust suppressants to unpaved roads and graded areas, covering or stabilization of transported bulk materials, prevention of carryout or trackout of soil materials to public roads, limiting the area subject to soil disturbance, construction of wind barriers, access restrictions to inactive sites as required by the applicable rules.</p> <p>Mitigation Measure 3.3-86: During all construction activities, the Project proponent shall</p>	LS

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p>implement the following dust control practices identified in Tables 6-2 and 6-3 of the GAMAQI (2002).</p> <ul style="list-style-type: none"> a. All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover. b. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. c. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall control fugitive dust emissions by application of water or by presoaking. d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained. e. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden. f. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. g. Limit traffic speeds on unpaved roads to 5 mph. h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. <p>Mitigation Measure 3.3-9Z: Asphalt paving shall be applied in accordance with APCD Rule 4641, the purpose of which is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations. The Project Applicant shall coordinate with the APCD, prior to Project asphalt paving activities, to ensure all Project asphalt paving would comply with this rule. The Project Applicant shall provide the City of Stockton with evidence of consultation with the APCD, including confirmation of compliance with APCD Rule 4641.</p>	

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
Impact 3.3-3: The proposed Project would not generate carbon monoxide hotspot impacts	LS	<i>None required.</i>	--
Impact 3.3-4: The proposed Project has the potential for public exposure to toxic air contaminants	LS	<i>None required.</i>	--
Impact 3.3-5: The proposed Project would not cause exposure to other emissions (such as those leading to odors) adversely affecting a substantial number of people	LS	<i>None required.</i>	--
BIOLOGICAL RESOURCES			
Impact 3.4-1: The proposed Project would not have a direct or indirect effect on special-status invertebrate species	LS	<i>None required.</i>	--
Impact 3.4-2: The proposed Project has the potential to have direct or indirect effects on special-status reptile and amphibian species	PS	<p>Mitigation Measure 3.4-1: <i>Prior to commencement of any grading activities, the Project proponent shall seek coverage under the San Joaquin County Multi-Species Habitat Conservation Plan (SJMSCP) to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the Migratory Bird Treaty Act (MBTA). Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.</i></p> <p>Mitigation Measure 3.4-2: <u>Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for Swainson's hawks. If no hawks or hawk nests are detected, then construction activities may commence. If Swainson's hawks or occupied nests are discovered, then the following shall be implemented:</u></p> <ul style="list-style-type: none"> <u>During the nesting season (February 15 through August 31) and Swainson's hawks are nesting in or near the Project site, a construction setback of 250 feet of the nest tree (as measured from under the nest) would be required until nesting is</u> 	LS

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><u>complete.</u></p> <p><u>This requirement is consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys as required.</u></p> <p><u>Mitigation Measure 3.4-3:</u> <u>Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for burrowing owls. If no owls or owl nests are detected, then construction activities may commence. If burrowing owls or occupied nests are discovered, then the following shall be implemented:</u></p> <ul style="list-style-type: none"> <u>During the nesting season (February 1 and August 31) and burrowing owls are present on-site, a 250-foot construction setback from the natal burrow would be required until nesting is complete.</u> <u>Outside the nesting season (September 1 and January 31) burrowing owls occupying the Project site should be evicted from the Project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995)</u> <p><u>These requirements are consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required.</u></p> <p><u>Mitigation Measure 3.4-4:</u> <u>Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for tricolored blackbird. If no tricolored blackbird or tricolored blackbird nests are detected, then construction activities may commence. If tricolored blackbird or occupied nests are discovered, then the following shall be implemented:</u></p> <ul style="list-style-type: none"> <u>A setback of 500 feet from colonial nesting areas shall be established and maintained during the nesting season for the period encompassing nest building</u> 	

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><u>and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by brightly colored temporary fencing.</u></p> <p><u>This requirement is consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys as required.</u></p>	
Impact 3.4-3: The proposed Project has the potential to have direct or indirect effects on special-status bird species	PS	Implement Mitigation Measure 3.4-1.	LS
Impact 3.4-4: The proposed Project has the potential to result in direct or indirect effects on special-status mammal species.	PS	Implement Mitigation Measure 3.4-1.	LS
Impact 3.4-5: The proposed Project would not result in direct or indirect effects on candidate, sensitive, or special-status plant species	LS	None required.	--
Impact 3.4-6: The proposed Project would not result in direct or indirect effects on candidate, sensitive, or special-status fish species	LS	None required.	--
Impact 3.4-7: The proposed Project would not affect protected wetlands and jurisdictional waters	LS	None required.	--
Impact 3.4-8: The proposed Project would not result in adverse effects on riparian habitat or a sensitive natural community	LS	None required.	--
Impact 3.4-9: The proposed Project would not result in interference with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites	LS	None required.	--
Impact 3.4-10: The proposed Project would not conflict with an adopted Habitat Conservation Plan	LS	None required.	--

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
Impact 3.4-11: The proposed Project has the potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	PS	Mitigation Measure 3.4-52: If removal of any oak tree on the project site is required, the project applicant or contractor shall hire a certified arborist shall to survey the oak trees proposed for removal to determine if they are Heritage Trees as defined in Stockton Municipal Code Chapter 16.130. <u>The survey shall occur prior to site disturbance.</u> The arborist report with its findings shall be submitted to the City's Community Development Department. If Heritage Trees are determined to exist on the property, removal of any such tree shall require a permit to be issued by the City in accordance with Stockton Municipal Code Chapter 16.130. The permittee shall comply with all permit conditions, including tree replacement at specified ratios.	LS
CULTURAL AND TRIBAL RESOURCES			
Impact 3.5-1: Project implementation would not cause a substantial adverse change to a significant historical resource, as defined in CEQA Guidelines §15064.5	LS	None required.	--
Impact 3.5-2: Project implementation has the potential to cause a substantial adverse change to a significant archaeological resource, as defined in CEQA Guidelines §15064.5, or a significant tribal cultural resource, as defined in Public Resources Code §21074	PS	<p>Mitigation Measure 3.5-1: Prior to any ground-disturbing activities on the Project site, <u>the Developer shall retain a qualified archaeologist and native American monitor shall to</u> conduct pre-construction worker cultural resources sensitivity training. The training session shall focus on the recognition of the types of historical and cultural, including Native American, resources that could be encountered; procedures to be followed if resources are found, <u>including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated;</u> and pertinent laws protecting these resources. <u>Training shall be scheduled at the discretion of the Project applicant in consultation with the City. The Developer shall be responsible for ensuring that all workers requiring training are in attendance.</u> Those in attendance shall be recorded, with records maintained on-site. Any new workers that were not part of the initial training shall be required to undergo a new training session.</p> <p>Mitigation Measure 3.5-2: If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, are found during grading and construction activities during any phase of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).</p>	LS

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p>Work shall not continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.</p> <p>If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Project applicant's expense.</p> <p><u>If the discovery proves to be significant under CEQA and cannot be avoided by the Project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts. Mitigation could include avoidance, preservation in place, or the scientific removal, analysis, reporting, and curation of any recovered cultural materials. Construction shall not resume in the area until appropriate protection and preservation measures are in place and have been approved by the Community Development Director or designee, and the qualified archaeologist states in writing that the proposed construction activities would not significantly damage any archaeological or tribal cultural resources.</u></p>	
Impact 3.5-3: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries	LS	None required.	--
GEOLOGY AND SOILS			
Impact 3.6-1: The proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure, or landslides	LS	None required.	--
Impact 3.6-2: Implementation and construction of the proposed Project may result in substantial soil erosion or the loss of topsoil	LS	None required.	--
Impact 3.6-3: The proposed Project has the potential to be located on a geologic unit or soil	LS	None required.	--

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
that is unstable, or that would become unstable as a result of Project implementation, and potentially result in landslide, lateral spreading, subsidence, liquefaction or collapse			
Impact 3.6-4: The proposed Project has the potential for expansive soils to create substantial risks to life or property	LS	<i>None required.</i>	--
Impact 3.6-5: The proposed Project has the potential to directly or indirectly destroy a unique geological feature or paleontological resource	PS	<p><i>Mitigation Measure 3.6-1:</i> <i>If any paleontological resources are found during grading and construction activities of the Project, all work shall be halted immediately within a 200-foot radius of the discovery, the City of Stockton Community Development Director shall be notified, and a professional vertebrate paleontologist (as defined by the Society for Vertebrate Paleontology) shall be contacted immediately to evaluate the find until a qualified paleontologist has evaluated the find. The paleontologist shall have the authority to stop or divert construction, as necessary. Documentation and treatment of the discovery shall occur in accordance with Society of Vertebrate Paleontology standards.</i></p> <p><i>Work shall not continue at the discovery site until the professional vertebrate paleontologist evaluates the find pursuant to the CEQA Guidelines and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including, but not limited to, preserving in place or relocating on the Project site, if feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology.</i></p>	LS
GREENHOUSE GASES, CLIMATE CHANGE AND ENERGY			
Impact 3.7-1: Project implementation would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	LS	<i>None required.</i>	--

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
Impact 3.7-2: Project implementation would not result in the inefficient, wasteful, or unnecessary use of energy resources, and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency	LS	None required.	--
HAZARDS AND HAZARDOUS MATERIALS			
Impact 3.8-1: Project implementation has the potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	PS	<p>Mitigation Measure 3.8-1: <u>Prior to initiating construction or grading activities, the construction contractor shall be provided with project-specific training regarding the identification and handling of hazardous materials and agency notification procedures. In the event that contaminated soils hazardous materials are encountered during construction, the Project applicant shall prepare and implement a Soils Management Plan (SMP) to provide guidance for the proper handling, onsite management, and disposal of impacted soil that might be encountered during construction activities shall be submitted and approved by the San Joaquin County Department of Environmental Health. The SMP shall establish management practices for handling of contaminated soils and other hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. The SMP would include, but is not limited to, an outline of how Project construction crews would identify, handle, and dispose of potentially contaminated soil; the qualifications of the appropriately trained professionals that would monitor soil conditions and conduct soil sampling during construction; laboratory testing; anticipated field screening methods and appropriate regulatory limits to be applied to determine proper handling and disposal; and requirements for documenting and reporting incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to dispose of contaminated materials. In the event that potentially contaminated soils were encountered within the footprint of construction, soils would be tested and stockpiled. The SMP shall be submitted to the San Joaquin County Department of Environmental Health for review and approval. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.</u></p> <p>Mitigation Measure 3.8-2: <u>Prior to initiation of any ground disturbance activities, a soil sampling and analysis workplan shall be submitted to the San Joaquin County Department of Environmental Health for approval. The sampling and analysis plan shall</u></p>	LS

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><u>meet the requirements of the Department of Toxic Substances Control Interim Guidance for Sampling Agricultural Properties (2008), and the County Department of Environmental Resources Recommended Soil and Groundwater Sampling for Underground Tank Investigations (2013). evenly Evenly distributed soil samples shall be conducted throughout the Development Area for analysis of pesticides and heavy metals. The samples shall be submitted for laboratory analysis of pesticides and heavy metals per DTSC and EPA protocols. The results of the soil sampling shall be submitted to the City of Stockton for review. If elevated levels of pesticides or heavy metals are detected during the laboratory analysis of the soils, a soil cleanup and remediation plan shall be prepared and implemented prior to the commencement of grading activities.</u></p> <p><u>If the sampling results indicate the presence of agrichemicals that exceed commercial screening levels, a removal action workplan shall be prepared in coordination with San Joaquin County Environmental Health Department. The removal action workplan shall include a detailed engineering plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection. A no further action letter shall be issued by San Joaquin County Environmental Health Department upon completion of the removal action. The removal action shall be deemed complete when the confirmation samples exhibit concentrations below the commercial screening levels, which will be established by the agencies.</u></p>	
Impact 3.8-2: Project implementation has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	LS	None required.	--
Impact 3.8-3: Project implementation has the potential to result in impacts from being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5	NI	None required.	--
Impact 3.8-4: Project implementation has the potential to result in a safety hazard for people residing or working on the Project site as a result of public airport or public use airport	LS	None required.	--

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<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
Impact 3.8-5: Project implementation has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LS	<i>None required.</i>	--
Impact 3.8-6: Project implementation has the potential to expose people or structures to a risk of loss, injury or death from wildland fires	LS	<i>None required.</i>	--
HYDROLOGY AND WATER QUALITY			
Impact 3.9-1: The proposed Project has the potential to violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality	LS	<i>None required.</i>	--
Impact 3.9-2: The proposed Project has the potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin	LS	<i>None required.</i>	--
Impact 3.9-3: The proposed Project would not alter the existing drainage pattern of the site or area, including the alteration of the course of a river or through the addition of impervious surfaces, in a manner which would result in substantial erosion, siltation, surface runoff, flooding, or polluted runoff	LS	<i>None required.</i>	--
Impact 3.9-4: The proposed Project has the potential to, in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation	PS	<i>Mitigation Measure 3.9-1:</i> All residential and non-residential structures within the Project site shall meet the urban level of flood protection, as required by the State of California Central Valley Flood Protection Act of 2008 (Senate Bill 5). Finished floor elevations of proposed residential structures shall be elevated to or above the prescribed 200-year floodplain elevation, or proposed nonresidential structures shall be floodproofed, consistent with the City of Stockton's Criteria for Development in 200-year Floodplains and City of Stockton Municipal Code. Code compliance shall be documented in materials prepared by licensed professionals and submitted to the Community	LS

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
		<i>Development Director <u>prior to issuance of grading permits.</u></i>	

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The following changes were made to pages ES-16 through ES-18 of Chapter ES of the Draft EIR:

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
TRANSPORTATION AND CIRCULATION			
Impact 3.13-1: Project implementation would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	PS	<p>Mitigation Measure 3.13-1: The Project applicant shall work with the City of Stockton to implement feasible Transportation Demand Management (TDM) strategies, which would decrease the VMT generated by the Project. Specific potential TDM strategies include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Provide <u>Coordinate</u> with public transit service agencies, including improving San Joaquin Rapid Transit District (RTD) <u>regarding</u> transit service connecting workers with existing and future residential developments; • <u>Coordinate with San Joaquin RTD regarding the potential for increasing service on Hopper Route 93;</u> • Implement a fair value commuting program or other pricing of vehicle travel and parking; • TDM coordinator for large employers, such as the LUSD, should the school site be developed; • Provide carpool and/or vanpool incentive programs; • Provide on-site lockers and showers for workers who take alternative transportation, such as those employed by the LUSD, should the school site be developed; • Promote walking and bicycling for employees who live and/or work in the area through the preparation of an Active Transportation Plan; • Incentivize the use of alternative travel modes for travel within the project site through shared use of e-bikes and e-scooters; • Allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours; and • Employer coordination to SJCOG's DIBs program for workers. <p>The TDM Plan shall be submitted to the City for review, and the effectiveness of the TDM Plan shall be evaluated, monitored, and revised, if necessary. The TDM Plan shall include the TDM strategies which will be implemented during the lifetime of the proposed Project and shall outline the anticipated effectiveness of the strategies to achieve the <u>home-based work VMT per worker target identified in the City's TIAG</u>. The effectiveness of the TDM Plan may be monitored through annual surveys to determine employee travel mode split and travel distance for home-based work trips, and/or the implementation of technology to determine the amount of traffic generated by and home-based work miles</p>	SU

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<i>traveled by employees, which shall be determined in coordination with the City and included as part of the TDM Plan. Monitoring of the effectiveness of the TDM Plan shall be mandatory at least for first three year after implementation of the TDMs to see how well the TDM Plan is performing, and to add new TDMs, if some measures become feasible later.</i>	
Impact 3.13-2: Project implementation would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities	LS	<i>None required.</i>	--
Impact 3.13-3: Project implementation would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS	<i>None required.</i>	--
Impact 3.13-4: Project implementation would not result in inadequate emergency access	LS	<i>None required.</i>	--
Impact 3.13-5: Project implementation would not cause impacts due to construction.	LS	<i>None required.</i>	--
UTILITIES AND SERVICE SYSTEMS			
Impact 3.14-1: The proposed Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	LS	<i>None required.</i>	--
Impact 3.14-2: The proposed Project would not result in a determination by the wastewater treatment and/or collection provider which serves or may serve the Project that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments	PS	Mitigation Measure 3.14-1: <i>Prior to occupancy of any building that would require wastewater treatment services, the Project proponent shall secure from the City of Stockton Municipal Utilities Department with a request for utility service adequate wastewater treatment capacity/allocation.</i>	LS
Impact 3.14-3: The proposed Project would not require or result in the construction of new wastewater treatment or collection facilities or	LS	<i>None required.</i>	--

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
expansion of existing facilities, the construction of which could cause significant environmental effects			
Impact 3.14-4: The proposed Project would not require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	<i>None required.</i>	--
Impact 3.14-5: The proposed Project would not have insufficient water supplies available to serve the Project from existing entitlements and resources	LS	<i>None required.</i>	--
Impact 3.14-6: The proposed Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	PS	Mitigation Measure 3.14-2: <i>Prior to the issuance of a building or grading permit, the project applicant shall submit a drainage plan to the City of Stockton for review and approval. The plan shall include an engineered Storm Water Quality Control Criteria Plan (SWQCCP) that demonstrates attainment of pre-project runoff requirements prior to release at the Bear Creek outfall. The plan shall describe the volume reduction measures and treatment controls, which may include, but not limited to vegetated swale, infiltration basin, rain garden, or bioretention, consistent with the Federal Clean Water Act, the City's Stormwater Quality Control Criteria Plan, the adopted municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit and the City's corresponding Stormwater Management Plan.</i> City of Stockton requirements.	LS

1.0 INTRODUCTION

No changes were made to Chapter 1.0 of the Draft EIR.

2.0 PROJECT DESCRIPTION

The following changes were made to page 2.0-12 of Chapter 2.0 of the Draft EIR:

ANNEXATION

The proposed Project includes an Annexation of 12 APNs totaling 306.03 acres. This includes the Development Area (six parcels totaling 236.30 acres), Non-development Area (six parcels totaling 56.03 acres), and the remaining Right-of-Way Annexation Area (13.7 acres of existing County right-of-way). The annexation will also include detachment from the Lincoln Fire District. Figure 2.0-10 shows the proposed annexation area. ~~Non-development area includes lands that will be.....~~

The following changes were made to pages 2.0-13 and 2.0-14 of Chapter 2.0 of the Draft EIR:

CITY OF STOCKTON

The City of Stockton will be the Lead Agency for the proposed Project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050. Actions that would be required from the City include, but are not limited to the following:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- Adoption of the Findings and Statement of Overriding Considerations;
- Adoption of General Plan Amendment (Land Use Map);
- Adoption of an Ordinance for City of Stockton Pre-Zoning;
- Approval of a Detachment Agreement from the Lincoln Fire District;
- Approval of a Planned Unit Residential Development (PURD) Permit;
- Approval of Vesting Tentative map;
- Approval of Annexation and Authorization to submit Annexation request and Submit Detachment Request for Lincoln Fire District to San Joaquin LAFCo;
- Approval of future Final Maps;
- Approval of future Improvement Plans;
- Approval of future Grading Plans;
- Approval of Building Permits;
- Issuance of grading, encroachment, and building permits; and
- City review and approval of Project utility plans.

OTHER GOVERNMENTAL AGENCY APPROVALS

The following agencies are considered "Responsible Agencies" and will need to rely on this EIR to issue permits or approve certain aspects of the proposed Project. A "Responsible Agency" is any public agency, other than the lead agency, which has the responsibility for approving the project

where more than one public agency is involved. Other governmental agencies that may require approval include, but are not limited to, the following:

- California Department of Fish and Wildlife (CDFW) – should a 1600 Streambed Alteration Agreement, or 401/404 Permit be required;
- Central Valley Flood Protection Board (CVFPB) – should offsite work impact Pixley Slough (which is not anticipated);
- Central Valley Regional Water Quality Control Board (CVRWQCB) – Storm Water Pollution Prevention Plan (SWPPP) approval pursuant to the Clean Water Act;
- CVRWQCB – Water quality certification pursuant to Section 401 of the Clean Water Act;
- San Joaquin County Flood Control and Water Conservation District;
- Native American Heritage Commission (NAHC);
- San Joaquin Local Agency Formation Commission (LAFCo) – Annexation to the City of Stockton and detachment from the Lincoln Rural Fire Protection District;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Construction-related permits;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Authority to Construct, Permit to Operate for stationary sources of air pollution
- Stockton Fire Department – Plan check of the site plan and roadway improvements for adequate emergency vehicle access and fire flow capabilities;
- San Joaquin Council of Governments (SJCOG) – Issuance of incidental take permit under the San Joaquin Multi-Species Habitat Conservation and Open Space Plan (SJMSCP);
- United States Army Corps. Of Engineers (USACE) – Permitting of federal jurisdictional areas pursuant to Section 404 of the Clean Water Act;
- Woodbridge Irrigation District.

A new figure, Figure 2.0-10 (Proposed Annexation) was added to page 2.0-45 of Chapter 2.0 of the Draft EIR:



3.1 AESTHETICS AND VISUAL RESOURCES

The following changes were made to page 3.1-10 of Section 3.1 of the Draft EIR:

Nevertheless, the loss of the visual appearance of the existing agricultural land on the site would alter the visual character of the Project site in perpetuity. Compliance with the requirements within the General Plan and Zoning Code would reduce visual impacts to the greatest extent feasible; however, the proposed Project would permanently convert the agricultural uses to urbanized uses. This is considered a **significant and unavoidable** impact. As discussed in Section 3.2, Agricultural Resources, while the proposed Project would contribute fees toward the purchase of conservation easements on agricultural lands through the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (as required by Mitigation Measure 3.2-1), those fees and conservation easements would not result in the creation of new farmland to offset the loss that would occur with Project implementation. The only way to mitigate this impact would be to prohibit the development of urban uses on the Project site; no additional mitigation is available. CEQA does not require that the project be changed in order to avoid an impact. There is no additional feasible mitigation available that would reduce this impact to a less than significant level. Overriding considerations for this significant and unavoidable impact would be provided in the Findings and Statement of Overriding Considerations for the Project.

3.2 AGRICULTURAL RESOURCES

The following changes were made to pages 3.2-13 and 3.2-14 of Section 3.2 of the Draft EIR:

The Envision Stockton 2040 General Plan EIR anticipated development of the Project site as part of the overall evaluation of the buildout of the City. The General Plan EIR addressed the conversion and loss of Important Farmland that would result from the build out of the General Plan (General Plan Draft EIR, pp. 4.2-10 through 4.2-12). The General Plan EIR determined that impacts would be significant and unavoidable. According to the General Plan EIR, although the General Plan includes policies and actions that would reduce and partially offset the conversion of farmland, it designates approximately 16,160 acres of farmlands of concern under CEQA for non-agricultural uses. Because these farmland areas are located near existing urbanized areas, they may not be viable for agricultural operations due to conflicts with nearby urbanized areas. The General Plan includes policies and actions that aim to concentrate growth and protect agricultural lands outside of the city from conversion to non-agricultural use. The General Plan EIR does not identify any mitigation measures to reduce this impact. The ~~As stated in the General Plan EIR, the only way to mitigate this impact would be to prohibit any development on farmland of concern. CEQA does not require that the project be changed in order to avoid an impact, and no additional mitigation is available, resulting in a significant and unavoidable impact.~~

While the proposed Project would contribute fees toward the purchase of conservation easements on agricultural lands through the SJMSCP (as required by Mitigation Measure 3.2-1), those fees and conservation easements would not result in the creation of new farmland to offset the loss that would occur with Project implementation. Implementation of the Project would result in a net loss of farmland, even with implementation of mitigation. As such, consistent with the conclusion of the General Plan EIR, the loss of Important Farmland would be a **significant and unavoidable** impact relative to this topic.

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MITIGATION MEASURE(S)

Mitigation Measure 3.2-1: Prior to the conversion of Important Farmland on the Project site, the Project applicant shall participate in the City's Agricultural Lands Mitigation Program, under which developers of the property shall contribute agricultural mitigation land or shall pay the Agricultural Land Mitigation Fee to the City- on a 1:1 basis for each acre of land converted. The Agricultural Land Mitigation Program provides that agricultural mitigation lands shall be dedicated to a qualifying management entity such as the Central Valley Farmland Trust. The fees shall be collected by the City, held in a dedicated account, and then expended by the City to acquire agricultural mitigation land or pay for the monitoring and administrative costs of the program. The fees may also be transferred to a qualifying entity for the same purpose. Payment in the in the City's Agricultural Lands Mitigation Program would be feasible or effective mitigation for conversion of agricultural land.

~~Participation~~ Alternatively, participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) that results in agricultural land mitigation may also be considered as the functional equivalent of mitigation for the loss of Important Farmland. The SJMSCP requires the payment of a per-acre fee for loss of wildlife habitat, which in San Joaquin County is largely integral with agricultural use. One important use of the fees is the acquisition of conservation easements over agricultural land that are intended to preserve the agricultural use of these lands in order to maintain their biological habitat values.

3.3 AIR QUALITY

The following changes were made to pages 3.3-26 and 3.3-27 of Section 3.3 of the Draft EIR:

District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

The Project would be subject to District Rule 4002, since the Project will include demolition and removal of existing structures. To protect the public from uncontrolled emissions of asbestos, this rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Any asbestos present must be handled in accordance with established work practice standards and disposal requirements.

District Rule 4601 (Architectural Coatings)

The Project would be subject to District Rule 4601 since it is expected to utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements.

The following changes were made to pages 3.3-31 through 3.3-34 of Section 3.3 of the Draft EIR:

The Project's operational ROG emissions are primarily from the Project's mobile vehicle emissions. However, a substantial portion of the ROG emissions are also from area sources, which include off-gassing from architectural coatings, off-gassing from consumer products, and the usage of landscape equipment. The only feasible mitigation to reduce the Project's operational emissions are to reduce the ROG content off-gassed from architectural coatings (by using architectural coatings that have fewer ROG emissions) and by utilizing landscaping equipment with fewer or no ROG emissions. There is no feasible mitigation to reduce mobile vehicle ROG emissions, or to reduce the amount of ROG off-gassing from consumer products, as these are not activities that the Project applicant would have the ability to feasibly influence.

Since operational ROG emissions were found to above the applicable SJVAPCD threshold, all potentially feasible mitigation measures were considered to reduce this to below the threshold. An assessment of potential transportation-related measures included in the California Air Pollution Control Officer's Association (CAPCOA) GHG Handbook, entitled "Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity",¹ is presented in detail in Appendix F of this EIR (i.e. the Traffic Analysis). As described in Appendix F, Mitigation measures to reduce the impact of the LeBaron Ranch Project on VMT were considered in compliance with the *City of Stockton Traffic Impact Analysis Guidelines*. The guidelines note:

"A list of mitigation measures applicable for consideration at the project-site level can be found in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (GHG Handbook)."

The assessment includes the feasibility and applicability of GHG Handbook measures for the proposed Project. Measures considered for the Project are those included in the GHG Handbook in the Transportation category. These measures, such as carshare programs and community-based travel planning, were considered as potential mitigation measures, but are not recommended. As described in further detail in Appendix F, such measures are not feasible for the project, since these systems require a geographic scale larger than an individual development project.² Additionally, the GHG Handbook presents measures which are not applicable to residential land use projects. These are measures which are primarily applicable to employment-generating uses, such as increased job density, ridesharing programs, and subsidized transit programs.³

Measures were also considered, but are not feasible because they are not within the authority of the applicant or the City of Stockton. For example, the San Joaquin Regional Transit District (RTD) provides limited public transit service to the Project site. The County Hopper Route 93 operates weekdays along West Lane, with eight northbound trips per day and ten southbound trips per day. County Hopper service is a deviated fixed route type of service. The GHG Handbook presents

¹ See: CAPCOA. 2024. Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Available at: <https://www.caleemod.com/handbook/index.html>

² Refer to Appendix F and Section 3.13: Transportation and Circulation of this EIR, for further detail.

³ Refer to Appendix F and Section 3.13: Transportation and Circulation of this EIR, for further detail.

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measures which are related to the structure of the community-level public transit system. While these measures have the potential to reduce VMT, the RTD has authority to implement the measures. Implementation of the measures, including development of a transit-oriented development, increased transit service frequency, provide bus rapid transit, or reduce transit fares, is not within the authority of the applicant or the City of Stockton.

The GHG Handbook presents measures which are considered not applicable to, or not feasible for, the LeBaron Ranch Project site. These measures were considered as potential mitigation measures, but are not recommended. The Project includes 194 high density multiple-family dwelling units. Current residential development in the vicinity of the Project site is predominantly composed of relatively lower density single family dwelling units. The General Plan travel demand model, used to estimate VMT for the Project, already includes relatively lower VMT per unit generated by the Project multiple family dwelling units.

The GHG Handbook includes a measure that involves affordable and below market rate housing, noting, "Multifamily residential units must be permanently dedicated as affordable for lower income families." The Project includes a mix of housing types: low-density single family dwelling units, medium-density single family dwelling units, and high-density multiple-family dwelling units. The Project does not include units that are deed restricted as "affordable units". Affordability by design, both for purchase and rent, will be created with some of the product within the medium density and high-density designations.

The GHG Handbook includes three measures that involves parking supply and parking cost, including limiting residential parking supply, unbundling residential parking costs from property cost, and implement market price public parking (on-street). For limiting residential parking supply, the GHG Handbook notes, "This measure is ineffective in locations where unrestricted street parking or other offsite parking is available nearby and has adequate capacity to accommodate project-related vehicle parking demand." Unrestricted street parking is available in the vicinity of the Project site, and is expected to be available in the future. Implementation of unbundling residential parking costs from property cost, would appear to require modification of Stockton Municipal Code section 16.64.040, *Number of parking spaces required*. In the description of implementing market price public parking, the GHG Handbook notes, "This measure will price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers." The Project is composed of residential land use, rather than central business districts, employment centers and retail centers. Therefore, these parking-related mitigation measures are not feasible for the Project.

The GHG Handbook includes a measure related to the density and connectivity of streets. the Project as proposed includes a relatively high density of street intersections within the Project site. The number of connections to surrounding arterial roadways (i.e., Eight Mile Road, West Lane, and Lower Sacramento Road), however, are constrained by existing adopted precise road plans for each of these roadways. As a result, the measure is considered not feasible for the Project.

Separately, with regard to potential energy measures, it should be noted that none of the energy-related measures in the GHG Handbook would be anticipated to reduce operational ROG emissions, which are the only operational emissions that are above the SJVAPCD operational thresholds for criteria pollutants. This is because ROG emissions are not generated by energy usage. Therefore, there are no additional feasible energy-related mitigation measures to reduce operational ROG emissions, beyond Mitigation Measures 3.3-1 through 3.3-3.

With regard to the potential for a Voluntary Emissions Reduction Agreement (VERA) measure, Mitigation Measure 3.3-4 requires the City to educate applicants on the benefits of a VERA, and requires the project applicant(s) to consult with the City regarding the results of SJVAPCD's Rule 9510 process, prior the building permit stage. If emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510 are not sufficient to reduce emissions to below the applicable SJVAPCD thresholds of significance for operational ROG, the project applicant is required under Mitigation Measure 3.3-4 to enter into a VERA with the SJVAPCD, to reduce emissions to below the applicable thresholds of significance, after taking into account any emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510.

With implementation of the available feasible mitigation measures (Mitigation Measures 3.3-1 through 3.3-4³, as provided below), the proposed Project's emissions would be reduced as shown in Table 3.3-10, below. It should be noted that Table 3.3-10 does not account for further potential reductions associated with the possibility of a VERA agreement; Table 3.3-10 also not account for further reductions in operational emissions that would occur due to implementation of Mitigation Measure 3.13-1, which requires the Project applicant to implement feasible TDM (i.e. VMT reduction) strategies.⁴

TABLE 3.3-10: OPERATIONAL PROJECT GENERATED EMISSIONS (TONS PER YEAR) - MITIGATED

POLLUTANT	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
THRESHOLD	100	10	10	27	15	15
EMISSIONS						
MOBILE	54.1	7.1	7.7	0.1	12.7	3.3
AREA	0	0	5.2	0	0	0
ENERGY	0.8	1.8	0.1	<0.1	0.1	0.1
WATER	0	0	0	0	0	0
WASTE	0	0	0	0	0	0
TOTAL EMISSIONS	54.9	8.8	13.0	0.2	12.8	3.5
EXCEEDS THRESHOLD?	N	N	Y	N	N	N

SOURCES: CALFEEMod (v.2022.1)

As shown in Table 3.3-10, above, the Project's ROG emissions could be reduced from approximately 14.3 to 13.0 tons per year, with the implementation of Mitigation Measures 3.3-1 through 3.3-3. However, this would not be sufficient to ensure a reduction of ROG to below the applicable Air District criteria pollutant threshold of 10 tons per year.

Separately, the SJVAPCD has developed daily mass emissions screening criteria for ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} to determine whether project emissions would result in a violation of an AAQS. Because the NAAQS and CAAQS are concentration-based standards, Project emissions were evaluated using the SJVAPCD mass emissions screening approach, which provides a preliminary assessment to determine whether a project would contribute to a violation of an AAQS. The screening is conducted by evaluating daily Project emissions against a 100 pound per day threshold

⁴ This is because the exact operational emissions reductions associated with Mitigation Measure 3.13-1 depend on the actual VMT reductions applied, which cannot be known at this time.

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for each criteria air pollutant. The following table (Table 3.3-11) provides the proposed Project's mitigated operational emissions in pounds per day in comparison to these screening thresholds. As shown in Table 3.3-11, the proposed Project's mitigated operational emissions would not exceed any of the daily mass screening criteria thresholds.

TABLE 3.3-11: OPERATIONAL PROJECT GENERATED EMISSIONS (POUNDS PER DAY) - MITIGATED

<u>POLLUTANT</u>	<u>CO</u>	<u>NO_x</u>	<u>ROG</u>	<u>SO_x</u>	<u>PM₁₀</u>	<u>PM_{2.5}</u>
<u>THRESHOLD (POUNDS/DAY)</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>EMISSIONS – TOTAL PROJECT</u>	<u>48.5</u>	<u>15.5</u>	<u>35.4</u>	<u>0.2</u>	<u>11.2</u>	<u>3.5</u>
<u>EXCEEDS THRESHOLD?</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>

SOURCES: CALEEMOD (v.2022.1)

NOTE: EMISSIONS ONLY INCLUDE THOSE EMISSIONS THAT ARE CONSIDERED "ON-SITE", PER SJVAPCD GUIDANCE. THIS EXCLUDES "MOBILE" EMISSIONS, EXCEPT FOR APPROXIMATELY 15% OF MOBILE EMISSIONS THAT ARE ESTIMATED TO BE ON-SITE.

Overall, since the Project's ROG emissions in terms of tons per year would be above the applicable Air district criteria pollutant threshold of 10 tons per year. Therefore, this impact would be considered **significant and unavoidable**.

The following changes were made to page 3.3-36 of Section 3.3 of the Draft EIR:

The estimated background health incidences of mean ozone annual health effects across the San Joaquin Valley are shown in Table 3.3-~~41~~^{5, 6}. The background health incidences provide an estimate of the average number of people over a given population that suffer from some adverse health effect over a given period. For example, the background health incidence in the San Joaquin Valley for total asthma-related emergency room visits for adults is 11,039 per year; this represents approximately 0.3% of the population as experiencing such incidents in a given year.

The following changes were made to page 3.3-37 of Section 3.3 of the Draft EIR:

Furthermore, as shown in Table 3.3-~~41~~¹², health-related incidences associated with ozone are relatively low in the San Joaquin Valley.

The following changes were made to pages 3.3-39 and 3.3-42 of Section 3.3 of the Draft EIR:

MITIGATION MEASURES

Mitigation Measure 3.3-1: ~~The project~~ Project applicant(s) shall comply with SJVAPCD Rule 4101, which prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants. Specifically, the project applicant(s), during

⁵ As provided for the San Joaquin Valley for Year 2025, as prepared by Ramboll U.S. Consulting Inc. in their *Analysis of Potential Health Effects of Criteria Air Pollutant Emission Impacts, North Manteca Annexation #1 Project*, March 2023.

⁶ Note: Although the Ramboll U.S. Consulting Inc. analysis for was prepared for a different project, the background health incidence rates are not project-specific. Rather, they are for the San Joaquin Valley as a whole for year 2025, and therefore are also provide a representative data snapshot for this project.

Project operation, shall not discharge into the atmosphere any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than (3) minutes in any one (1) hour which is: a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; b) Of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of this rule.

Mitigation Measure 3.3-2: ~~The project~~Project applicant(s) shall comply with SJVAPCD Rule 4601, during Project construction and operation, which ~~limits project has agreed to abide by more~~limits stringent VOC emissions requirements from architectural coatings. This rule specifies ~~Emissions of volatile organic compounds from architectural coatings by specifying~~storage, clean up and labeling requirements. Specific VOC limits for architectural coatings are provided within the Air District's website, located at: <https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations/> ~~(The project has agreed to abide by more stringent VOC emissions requirements.)~~

Mitigation Measure 3.3-3: ~~The project~~Project applicant(s) shall utilize low-VOC paints, equivalent to 10 g/L of ROG, if commercially available.

Mitigation Measure 3.3-4: The City shall educate the Project applicant(s) on the benefits of a VERA. The Project applicant(s) shall consult with the City regarding the results of SJVAPCD's Rule 9510 process, prior the building permit stage. If emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510 are not sufficient to reduce emissions to below the applicable SJVAPCD thresholds of significance for operational ROG, the project applicant shall enter into a VERA with the SJVAPCD, to reduce emissions to below the applicable thresholds of significance, after taking into account any emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510. If conditions warrant participation in a VERA, the VERA shall demonstrate a reduction in emissions that meets SJVAPCD's ROG operational emissions threshold through a process that funds and implements emissions reduction projects within the SJVAB. The types of emission reduction projects that could be funded include replacing old heavy-duty trucks with cleaner, more efficient heavy-duty trucks, for example. If a VERA is found to be required, the project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level.

Mitigation Measure 3.3-5: ~~The Project applicant(s) shall provide information regarding te~~consider the Air District's Clean Green Yard Machines (CGYM) program, which provides incentive funding for the replacement of existing gas powered lawn and garden equipment, to the home-buyers at time of sale of the housing units by the applicant. More information on the District CGYM program and funding can be found at: <https://ww2.valleyair.org/grants/zero-emission-landscaping-equipment-voucher-program/>.

Impact 3.3-2: Proposed Project construction activities would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan. (Less than Significant with Mitigation)

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. Construction-related activities would result in Project-generated emissions from demolition, site

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preparation, grading, paving, building construction, and architectural coatings. CalEEMod™ (v.2022.1) was used to estimate construction emissions for the proposed Project. Table 3.3-~~12~~13, below, provides the construction criteria pollutant emissions associated with implementation of the proposed Project.

TABLE 3.3-~~12~~13: MAXIMUM CONSTRUCTION PROJECT GENERATED EMISSIONS (TONS PER YEAR)

POLLUTANT	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
THRESHOLD	100	10	10	27	15	15
EMISSIONS	4.9	3.1	8.5	<0.1	1.4	0.6
EXCEEDS THRESHOLD?	N	N	N	N	N	N

SOURCES: CAL EEMOD (v.2022.1)

If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for construction-generated emissions, the proposed Project will have a significant impact on air quality and conflict with the Clean Air Plan and all feasible mitigation are required to be implemented to reduce emissions. As shown in Table 3.3-~~12~~13, Project maximum construction emissions would not exceed the SJVAPCD thresholds of significance. Nevertheless, regardless of emission quantities, the SJVAPCD requires construction related mitigation in accordance with their rules and regulations. Nevertheless, implementation of the Mitigation Measure 3.3-4-5 through 3.3-7-8 (see below), would further reduce proposed Project construction related emissions to the extent possible.

CONCLUSION

The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements, as well as implement the mitigation measures provided by the SJVAPCD for construction-related PM₁₀ emissions, including those provided in Mitigation Measure 3.3-4-6 through 3.3-7-9. Therefore, the Project's criteria pollutant emissions would be considered to have a **less than significant** impact and the Project would not impede or conflict with the Clean Air Plan.

MITIGATION MEASURE(S)

Mitigation Measure 3.3-~~64~~: Prior to the issuance of a Grading Permit for each phase of the Project, the Project Proponent shall prepare and submit a Dust Control Plan that meets all the applicable requirements of APCD Rule 8021, Section 6.3, for the review and approval of the APCD Air Pollution Control Officer.

Mitigation Measure 3.3-~~57~~: During all construction activities, the Project Proponent shall implement dust control measures, as required by APCD Rules 8011-8081, to limit Visible Dust Emissions to 20% opacity or less. Dust control measures shall include application of water or chemical dust suppressants to unpaved roads and graded areas, covering or stabilization of transported bulk materials, prevention of carryout or trackout of soil materials to public roads, limiting the area subject to soil disturbance, construction of wind barriers, access restrictions to inactive sites as required by the applicable rules.

Mitigation Measure 3.3-~~68~~: During all construction activities, the Project proponent shall implement the following dust control practices identified in Tables 6-2 and 6-3 of the GAMAQI (2002).

- a. All disturbed areas, including storage piles, which are not being actively utilized for

construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover.

- b. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- c. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall control fugitive dust emissions by application of water or by presoaking.
- d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained.
- e. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.
- f. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- g. Limit traffic speeds on unpaved roads to 5 mph.
- h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Mitigation Measure 3.3-79: Asphalt paving shall be applied in accordance with APCD Rule 4641, the purpose of which is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations. The Project Applicant shall coordinate with the APCD, prior to Project asphalt paving activities, to ensure all Project asphalt paving would comply with this rule. The Project Applicant shall provide the City of Stockton with evidence of consultation with the APCD, including confirmation of compliance with APCD Rule 4641.

The following changes were made to page 3.3-44 of Section 3.3 of the Draft EIR:

Table 3.3-~~13~~14 provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses.

TABLE 3.3-~~13~~14: CARB MINIMUM SEPARATION RECOMMENDATIONS ON SITING SENSITIVE LAND USES

SOURCE CATEGORY	ADVISORY RECOMMENDATIONS
Freeways and High-Traffic Roads	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation

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<i>SOURCE CATEGORY</i>	<i>ADVISORY RECOMMENDATIONS</i>
	approaches.
Ports	<ul style="list-style-type: none"> • Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.

SOURCES: AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE" (CARB 2005)

The following changes were made to pages 3.3-45 and 3.3-46 of Section 3.3 of the Draft EIR:

Residences are proposed as part of the Project, which are considered traditional sensitive receptors. However, no residences would be located within 500 feet of a freeway, urban road with 100,000 vehicles/day or more, or a rural road with 50,000 vehicles/day or more. Additionally, under CEQA, an EIR need not analyze the impacts of the existing environment on the Project.

With regard to nearby sensitive receptors, although the Project does not include substantial sources of TACs, there would be some TACs during the Project's construction and operational phases. Specifically, virtually no residual TAC emissions and corresponding cancer risk are anticipated after Project construction. The proposed Project is not anticipated to generate long term, operational sources of TAC emissions because the proposed Project would only include residential land uses and public open space. The Project would not include heavy industrial uses or other land uses typically associated with stationary sources of TACs. during the Project's operational phase, the Project would generate some heavy-duty trucks, which are an emitter of diesel particulate matter (DPM). In particular, DPM is emitted from on-site heavy-duty truck vehicle circulation and idling, and off-site mobile travel. Additionally, during Project operation, DPM would be generated by heavy-duty off-road construction vehicles. The SJVAPCD has established a screening calculator entitled the "Prioritization Calculator". An estimate of DPM emissions generated by the proposed project was calculated. Specifically, during Project operation, heavy-duty trucks would generate DPM from on-site mobile and idling emissions, and off-site mobile emissions 0.25 miles from the Project site, in accordance with the California Office of Environmental Health Hazard Assessment (OEHHA) guidance, as recommended by the SJVAPCD. The estimate of DPM emissions were based on the data provided in the Traffic Analysis for the proposed project, and with diesel particulate matter mobile emission rates from CARB's EMFAC2021 database, and from standard heavy-duty truck idling emission rates from CARB. Additionally, construction-related off-road construction vehicle emissions data was provided by CalEEMod.

The results of the screening analysis show that the cancer and non-cancer risks associated with the proposed Project, inclusive of both construction and operational-related sources, are below the SJVAPCD screening thresholds contained within their Prioritization Calculator. Specifically, the

Prioritization Calculator estimates that the prioritization score associated with total cancer risk from proposed project operational and construction-related DPM (combined) would be approximately 9.31, below the SJVAPCD threshold of 10 that would require development of air toxics Health Risk Assessment (HRA) that includes air dispersion modeling.⁷ Additionally, non-cancer (i.e. chronic and acute risks) associated with project DPM would also be well below the applicable thresholds for the Maximally Exposed Individual (i.e. greater than or equal to the Hazard Index level of 1). Therefore, the complex air dispersion modeling using software such as AERMOD is not required. See Appendix B for further detail.

Separately,

it should be noted that the mobile vehicles generated by the Project during operation would generate UFPs through vehicle emissions, braking, and tire wear. Like PM in general, (though generating even higher risk per unit than larger particle sizes) UFPs are notable for their potential to generate chronic risks associated with cardiovascular disease, potential long-term loss of lung function, and cancer. According to a recent study prepared for the European Geosciences Union, UFPs vary widely as a proportion of PM overall, depending on location; specifically, the PM_{0.1} to PM_{2.5} ratio analyzed in approximately 39 cities in the United States varied from approximately 1% to 16%.⁸ These factors vary so widely because the sources of PM_{0.1} vary substantially from city to city. For example, cities that are located close to substantial sources of natural gas combustion have higher PM_{0.1} to PM_{2.5} ratios, since almost all the PM emitted by natural gas combustion is in the PM_{0.1} size fraction, whereas this is only true for less than half of the PM emitted by gasoline and diesel fuel combustion. Taken together, these facts support the potential importance of natural gas combustion for ambient PM_{0.1} concentrations.

3.4 BIOLOGICAL RESOURCES

The following changes were made to page 3.4-3 of Section 3.4 of the Draft EIR:

Field Surveys

The Project site was subject to a field surveys by Principal Biologist Steve McMurtry on April 22, 2022, and May 15, 2023. The site reconnaissance surveys served several purposes. First, they served as reconnaissance of the site to establish the existing conditions of the site and to verify information gathered in the pre-field investigation. This included identification of the habitat types, hydrologic features, topography, soil characteristics, and vegetation. The field investigations followed the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2009). Habitat was recorded. Visibility during each survey was excellent.

The following changes were made to page 3.4-29 of Section 3.4 of the Draft EIR:

Other Insects: There are two other insects that are not formally listed, special-status species, but are included in the CNDDDB search results. These include crotch bumble bee (*Bombus crotchii*) and

⁷ Sensitive receptors were assumed to be within the 0-100 meter distance range from the Project site, which represents the most conservative distance assumption.

⁸ Venecek, M. A., Yu, X., and Kleeman, M. J.: Predicted ultrafine particulate matter source contribution across the continental United States during summertime air pollution events, Atmos. Chem. Phys., 19, 9399–9412, <https://doi.org/10.5194/acp-19-9399-2019>, 2019.

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American bumble bee (*Bombus pensylvanicus*). Neither species are covered by the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan ("Plan" or "SJMSCP"). It is noted that the crotch bumble is a candidate species for listing under the State Endangered Species Act.

While these species are documented within the nine (9)-quad region for the Project site, they are not documented on the Project site. As shown in Table 3.4-3, appropriate habitat for crotch bumble bee (*Bombus crotchii*) and American bumble bee (*Bombus pensylvanicus*) is not present. This determination is based on the field surveys completed by Principal Biologist Steve McMurtry on April 22, 2022, and May 15, 2023. No special-status invertebrates were observed within the Project site during field surveys and none are expected to be affected by the proposed Project based on the lack of appropriate habitat. The habitat present on the Project site is not ideal natural habitat for these species and none are believed to be present. Further, the nearest CNDDDB occurrence of crotch bumble bee is over 20 miles southwest of the Project site. The nearest CNDDDB occurrence of American bumble bee is approximately 4.1 miles or further north of the Project site. -The habitat present on the Project site is not ideal natural habitat for these species and none are believed to be present.

Conclusion: The Project site is located within the jurisdiction of the ~~San Joaquin County Multi-Species Habitat Conservation and Open Space Plan ("Plan" or "SJMSCP")~~ and is located within the Central Zone of the SJMSCP. Within the Central Zone, the Project site is located in the Category C/Pay Zone B. The Category C/Pay Zone B includes parcels containing habitat types classified as Agricultural Habitat Lands which are not otherwise exempt. Applicants pay mitigation fees on a per-acre basis, as established by the JPA, according to the measures needed to mitigate impacts to the various habitat and biological resources. The project applicant would be required to seek coverage under the SJMSCP and would be subject to the Category C/Pay Zone B fees in order to mitigate for any habitat impacts. Coverage involves compensation for habitat impacts on covered species through payment of development fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. In addition, coverage includes incidental take avoidance and minimization measures for species that could be affected as a result of the proposed project. The valley elderberry longhorn beetle, longhorn fairy shrimp, vernal pool fairy shrimp, and midvalley fairy shrimp are covered species under the SJMCP.

The following changes were made to page 3.4-32 of Section 3.4 of the Draft EIR:

Analysis: Powerlines and trees located in the region represent potentially suitable nesting habitat for a variety of special-status birds. Additionally, the agricultural land represents potentially suitable nesting habitat for some ground-nesting birds. In general, most nesting occurs from late February and early March through late July and early August, depending on various environmental conditions. The CNDDDB currently contains records for Swainson's hawk, burrowing owl, and tricolored blackbird in the vicinity of the Project site. In addition to the species described above, common raptors, may nest in or adjacent to the Project site. Further, indirect impacts related to bird collision with glass windows and bird mortality associated with domestic pets could occur. While avian mortality due to window collisions is a real phenomenon, CEQA-level assessments of this risk are typically limited to developments with an especially high percentage of clear and/ or reflective glazing (glass, windows) on exterior facades, and/ or other specific elements deemed likely to result in a high rate of collisions.

Glazing on the proposed residential windows would be minimal. The glazing included in the Project consists entirely of windows for the residential units, all of which are isolated from each other at regular intervals versus being grouped/conjoined to form larger contiguous window panels, and each is further divided into smaller areas. The elevations also feature forms of architectural relief (overhangs, spatially offset adjacent faces) as well as varied (opaque) materials and colors, all of which would break up the exterior visually (i.e., create “visual noise”), and increase the likelihood that birds would perceive the building overall as a solid surface.

Overall, by current architectural/design standards, the project provides minimal risk of bird collisions. The number of birds that would collide with the building over time is virtually impossible to estimate, and thus speculative. In any event, these impacts are unlikely to be significant at a regional or even local scale. In particular, bird strikes (to the degree that such occur, if at all) are more likely to involve common (and not special-status) species given their relative abundance in the area and local conditions. The impact related to bird collisions would be less than significant, and no mitigation is required.

New sources of noise and light during the construction and operational phases of the project could adversely affect nesters if they located adjacent to the Project site in any given year. Additionally, the proposed Project would eliminate the agricultural areas on the Project site, which serve as potential foraging habitat for birds throughout the year. Mitigation Measure 3.4-1 requires participation in the SJMSCP. As part of the SJMSCP, SJCOG requires preconstruction surveys for projects that initiate grading activities during the avian breeding season (March 1 – August 31). When active nests are identified, the biologists develop buffer zones around the active nests as deemed appropriate until the young have fledged. SJCOG also uses the fees to purchase habitat as compensation for the loss of foraging habitat. These ITMMs are included in Mitigation Measures 3.4-2 through 3.4-4. These mitigation measures provide more details about what SJMSCP already requires (i.e., ITMMs) under Mitigation Measure 3.4-1. Implementation of the proposed Project, with the Mitigation Measures 3.4-1 through 3.4-4, would ensure that potential impacts to special status birds are reduced to a **less than significant** level.

MITIGATION MEASURE(S)

*Implement **Mitigation Measure 3.4-1.***

Mitigation Measure 3.4-2: Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for Swainson’s hawks. If no hawks or hawk nests are detected, then construction activities may commence. If Swainson’s hawks or occupied nests are discovered, then the following shall be implemented:

- During the nesting season (February 15 through August 31) and Swainson’s hawks are nesting in or near the Project site, a construction setback of 250 feet of the nest tree (as measured from under the nest) would be required until nesting is complete.

This requirement is consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys as required.

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Mitigation Measure 3.4-3: *Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for burrowing owls. If no owls or owl nests are detected, then construction activities may commence. If burrowing owls or occupied nests are discovered, then the following shall be implemented:*

- *During the nesting season (February 1 and August 31) and burrowing owls are present on-site, a 250-foot construction setback from the natal burrow would be required until nesting is complete.*
- *Outside the nesting season (September 1 and January 31) burrowing owls occupying the Project site should be evicted from the Project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995)*

These requirements are consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required.

Mitigation Measure 3.4-4: *Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for tricolored blackbird. If no tricolored blackbird or tricolored blackbird nests are detected, then construction activities may commence. If tricolored blackbird or occupied nests are discovered, then the following shall be implemented:*

- *A setback of 500 feet from colonial nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by brightly colored temporary fencing.*

This requirement is consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys as required.

The following changes were made to page 3.4-38 of Section 3.4 of the Draft EIR:

The following mitigation measures would require compliance with the Stockton Municipal Code for removal and replacement of Heritage Oak Trees. With the implementation of the following mitigation measures, the proposed Project would have a **less than significant** impact relative to this topic.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-52: *If removal of any oak tree on the project site is required, the project applicant or contractor shall hire a certified arborist ~~shall to~~ survey the oak trees proposed for removal to determine if they are Heritage Trees as defined in Stockton Municipal Code Chapter 16.130. The survey shall occur prior to site disturbance. The arborist report with its findings shall be submitted to the City's Community Development Department. If Heritage Trees are determined to*

exist on the property, removal of any such tree shall require a permit to be issued by the City in accordance with Stockton Municipal Code Chapter 16.130. The permittee shall comply with all permit conditions, including tree replacement at specified ratios.

3.5 CULTURAL AND TRIBAL RESOURCES

The following changes were made to pages 3.5-12 through 3.5-14 of Section 3.5 of the Draft EIR:

Impact 3.5-2: Project implementation has the potential to cause a substantial adverse change to a significant archaeological resource, as defined in CEQA Guidelines §15064.5, or a significant tribal cultural resource, as defined in Public Resources Code §21074 (Less than Significant with Mitigation)

The Project site is located in an area known to have archaeological, cultural, and tribal cultural resources. As noted above, a CHRIS search was requested from the CCIC, which included the Project site and a 0.25-mile radius. According to the CCIC CHRIS results, no cultural resources have been reported within the Project site; however, several resources have been found within the 0.25-mile search radius. A letter was sent to the NAHC requesting a records search of the Sacred Lands files for the Project site, as well as a list of Native American tribes that may have knowledge of cultural resources in the Project site. On August 24, 2023, the NAHC responded indicating that results were negative for Sacred Lands. The NAHC provided a list of individuals and groups to contact regarding potential cultural resources within the Project site. Letters were sent to the groups and individuals listed on July 29, 2023, in compliance with AB 52 and SB 18 tribal consultation requirements; refer to Appendix D for tribal consultation communications. The consultation letters provided information regarding the proposed Project and contact information for the Project Planner. Under AB 52, Native American tribes have 30 days to respond and request further project information and formal consultation. No tribal organizations responded requesting formal consultation with the City.

Although no archeological resources or Native American tribal cultural resources are known to occur within the Project site, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of previously unknown archaeological resources and/or tribal cultural resources. Implementation of Mitigation Measures 3.5-1 through 3.5-2 would ensure that the potential impact to archaeological and tribal cultural resources is ***less than significant***.

MITIGATION MEASURE(S)

Mitigation Measure 3.5-1: *Prior to any ground-disturbing activities on the Project site, the Developer shall retain a qualified archaeologist and native American monitor ~~shall to~~ conduct pre-construction worker cultural resources sensitivity training. The training session shall focus on the recognition of the types of historical and cultural, including Native American, resources that could be encountered; procedures to be followed if resources are found, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and pertinent laws protecting these resources. Training shall be scheduled at the discretion of the Project applicant in consultation with the City. The Developer shall be responsible for ensuring that all workers requiring training are in attendance. Those in attendance shall be recorded, with records maintained on-site.*

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Any new workers that were not part of the initial training shall be required to undergo a new training session.

Mitigation Measure 3.5-2: *If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, are found during grading and construction activities during any phase of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*

Work shall not continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.

If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Project applicant's expense.

If the discovery proves to be significant under CEQA and cannot be avoided by the Project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts. Mitigation could include avoidance, preservation in place, or the scientific removal, analysis, reporting, and curation of any recovered cultural materials. Construction shall not resume in the area until appropriate protection and preservation measures are in place and have been approved by the Community Development Director or designee, and the qualified archaeologist states in writing that the proposed construction activities would not significantly damage any archaeological or tribal cultural resources.

Impact 3.5-3: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries (Less than Significant)

Indications suggest that humans have occupied San Joaquin County for over 10,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials.

Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during Project implementation. Additionally, Section 16.36.050 of the Stockton Municipal Code requires construction activities to cease in the event human remains are discovered during construction, and the County Coroner and Director must be notified immediately in compliance with CEQA Guidelines 15064.5(d). A qualified archaeologist shall be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify the most likely descendent of the Native American to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. If a most likely descendant cannot be identified or fails to make a recommendation, or the landowner

rejects the recommendations of the most likely descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner, then the landowner shall rebury the remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

3.6 GEOLOGY AND SOILS

The following changes were made to pages 3.6-15 and 3.6-16 of Section 3.6 of the Draft EIR:

The Project site is relatively flat; therefore, the potential for a landslide in the Project site is non-existent. Some limited potential for slope instability risk could arise during grading and construction activities, where slopes could be over-steepened. However, this risk is mitigated by adhering to relevant California Building Code requirements, which includes requirements for building design and construction. Additionally, according to the CGS Information Warehouse: Regulatory Maps, the site is not located within a Landslide and Liquefaction Zone. As a result, the probability of landslides causing substantial adverse effects on people or structures is less than significant.

The following changes were made to page 3.6-17 of Section 3.6 of the Draft EIR:

Overall, compliance with applicable State and City requirements, including but not limited to the NPDES Stormwater Program and the City's Grading and Erosion Control Ordinance, would ensure that the proposed Project would have a ***less-than-significant*** impact relative to this topic.

The following changes were made to page 3.6-20 of Section 3.6 of the Draft EIR:

MITIGATION MEASURE(S)

Mitigation Measure 3.6-1: *If any paleontological resources are found during grading and construction activities of the Project, all work shall be halted immediately within a 200-foot radius of the discovery, the City of Stockton Community Development Director shall be notified, and a professional vertebrate paleontologist (as defined by the Society for Vertebrate Paleontology) shall be contacted immediately to evaluate the find until a qualified paleontologist has evaluated the find. The paleontologist shall have the authority to stop or divert construction, as necessary. Documentation and treatment of the discovery shall occur in accordance with Society of Vertebrate Paleontology standards.*

Work shall not continue at the discovery site until the professional vertebrate paleontologist evaluates the find pursuant to the CEQA Guidelines and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including, but not limited to, preserving in place or relocating on the Project site, if feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology.

3.7 GREENHOUSE GASES, CLIMATE CHANGE, AND ENERGY

The following changes were made to pages 3.7-24 and 3.7-25 of Section 3.7 of the Draft EIR:

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City of Stockton Climate Action Plan

The City of Stockton Climate Action Plan (2014) sets forth a strategy to reduce community-generated GHG emissions, consistent with statewide GHG reduction efforts. As a condition for approval of the 2035 General Plan, the City of Stockton entered into a Settlement Agreement with the Sierra Club and the California Attorney General's Office in October 2008. The Settlement Agreement was enacted to ensure future growth outlined in the City of Stockton 2035 General Plan addresses GHG emissions in a meaningful and constructive manner. The City of Stockton Climate Action Plan (CAP) outlines a framework to feasibly reduce community GHG emissions in a manner that is supportive of AB 32 and is consistent with the Settlement Agreement and 2035 General Plan policy. The CAP is considered functionally equivalent to a GHG Reduction Plan, given that both refer to a document that quantifies and reduces GHG emissions within a particular jurisdiction.

A "Qualified GHG Reduction Plan" under CEQA refers to a plan that meets specific criteria for reducing greenhouse gas (GHG) emissions. This plan is intended to be used as a tool for evaluating the environmental impacts of proposed projects and plans under CEQA.

A Qualified GHG Reduction Plan must:

1. Quantify existing and projected GHG emissions.
2. Develop a level of cumulative GHG emissions that, based on substantial evidence, would not be considered significant for CEQA purposes.
3. Specify measures and standards that would ensure the level of GHG emissions is achieved.
4. Include monitoring to track progress in achieving the GHG reduction goals.

The plan must also comply with CEQA Guidelines Section 15183.5, which outlines the requirements for Qualified GHG Reduction Plans. These plans are intended to be used for both project-level and plan-level analyses under CEQA. Based on these criteria, the City of Stockton Climate Action Plan is not considered a "Qualified GHG Reduction Plan", since it does not include a level of cumulative GHG emissions that, based on substantial evidence, would not be considered significant for CEQA purposes, consistent with the latest case law.

Specifically, the City of Stockton Climate Action Plan includes community and municipal GHG reduction targets. The City of Stockton Climate Action Plan states: "...the City now proposes approximately 10% below 2005 levels [by year 2020] as its GHG reduction goal which would be consistent with the level of reductions needed at the state level to meet the AB 32 goal, compared to statewide 2005 levels." See City of Stockton Climate Action Plan page ES-7. However, this threshold is not meant for usage as a CEQA threshold. Moreover, it should be noted that year 2020 has already come and gone. Therefore, this emissions target is no longer relevant. Furthermore, it is not appropriate to translate this target into requirements for an individual project, since there is no clear mechanism to do so.

Separately, the City of Stockton Climate Action Plan states that "This plan, if fully implemented, would result in a 20% reduction in per capita GHG emission from 2005 to 2020. Compared to the statewide effort needed to meet AB 32, for the land use sector (e.g. excluding heavy industrial sources, marine transportation, etc., which are not included in Stockton's local inventory), the state would need to reduce per capita GHG emissions from the land use sector from 10.0 MT/person in

1990 to approximately 7.4 MT/person in 2020. Implementation of the CAP would result in reducing Stockton's emissions from approximately 8.5 MT/person in 2005 to 6.8 MT/person in 2020, which is slightly less than the state goal in 2020 (see data in Appendix E)". However, subsequently, the *Golden Door Properties, LLC v. County of San Diego* case held that the use of a quantitative threshold (like the efficiency threshold described above), which has historically been used for EIRs throughout California, must be adopted by the City via a resolution, ordinance or regulation based on a public review process, and supported by substantial evidence. However, such a quantitative threshold as included with the City of Stockton Climate Action Plan has never been specifically adopted as a threshold by the City via a resolution, ordinance, or regulation. Moreover, this efficiency threshold also relates only to year 2020, which has already come and gone. Therefore, overall, the usage of a per capita efficiency metric, such as the one included within the City of Stockton Climate Action Plan, is also not relevant or appropriate in a CEQA context.

The following changes were made to page 3.7-25 of the Draft EIR:

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For individual proposed projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The City of Stockton does have a formal GHG emissions reduction plan, in the form of the City of Stockton Climate Action Plan (2014). However, the City of Stockton Climate Action Plan only provided analysis of the Project's emissions and established an emissions target for year 2020, which has come and gone. Moreover, the Stockton Climate Action Plan is not considered a "Qualified GHG Reduction Plan. Therefore, analysis of the Project's consistency with the Stockton Climate Action Plan is provided for informational purposes only.

In addition, the Project is also assessed based on its consistency with CARB's adopted Scoping Plans, including the Project's compliance with relevant Scoping Plan measures, as well as the latest RTP/SCS for the region within which the Project is located within (i.e., the San Joaquin Council of Governments (SJCOG) 2022 RTP/SCS). It should be noted that the Scoping Plan is consistent with the AB 1279 GHG reduction targets of achieving carbon neutrality by 2045, and reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Therefore, consistency with the CARB's most recent Scoping Plan would also demonstrate consistency with the carbon neutrality requirements encapsulated by AB 1279. Furthermore Separately, the Project is evaluated for its consistency with the City of Stockton Climate Action Plan (CAP), which was adopted in 2014, for informational purposes only.

The following changes were made to pages 3.7-26 through 3.7-35 of Section 3.7 of the Draft EIR:

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Impact 3.7-1: Project implementation would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Less than Significant)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the Project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to Project development would be primarily associated with increases of CO₂ and other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O), from mobile sources and utility usage.

Several statewide GHG reduction strategies apply to the Project either directly or indirectly. A summary of these strategies is provided in Table 3.7-2, below.

TABLE 3.7-2: SUMMARY OF STATEWIDE GHG REDUCTION STRATEGIES THAT APPLY TO THE PROJECT

<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
<u>BUILDING COMPONENTS / FACILITY OPERATIONS</u>		
<u>Roofs/Ceilings/ Insulation</u>	<u>CAL Green Code (Title 24, Part 11) California Energy Code</u> (Title 24, Part 6)	The Project must comply with efficiency standards regarding roofing, ceilings, and insulation. For example: <u>Roofs/Ceilings: New construction must reduce roof heat island effects per CALGreen Code Section 106.11.2, which requires use of roofing materials having a minimum aged solar reflectance, thermal emittance complying with Sections A5.106.11.2.2 and A5.106.11.2.3, or a minimum aged Solar Reflectance Index as specified in Table A5.106.11.2.2 or A5.106.11.2.3. Roofing materials must also meet solar reflectance and thermal emittance standards contained in Title 20 Standards.</u> <u>Roof/Ceiling Insulation: Requirements for the installation of roofing and ceiling insulation (see Title 24, Part 6 Compliance Manual at Section 3.2.2).</u>
<u>Flooring</u>	<u>CALGreen Code</u>	<u>The Project must comply with efficiency standards regarding flooring materials. For example, for 80% of floor area receiving "resilient flooring," the flooring must meet applicable installation and material requirements contained in CALGreen Code Section 5.504.4.6.</u>
<u>Window and Doors</u>	<u>California Energy Code</u>	<u>The Project must comply with fenestration efficiency requirements. For example, the choice of windows, glazed doors, and any skylights for the Project must conform to energy consumption requirements affecting size, orientation, and types of fenestration products used (see Title 24, Part 6 Compliance Manual, Section 3.3).</u>
<u>Building Walls/ Insulation</u>	<u>CALGreen Code California Energy</u>	<u>The Project must comply with efficiency requirements for building</u>

<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
	<u>Code</u>	<p>walls and insulation.</p> <p>Exterior Walls: Must meet requirements in the current edition of the <u>California Energy Code</u> and comply with <u>Section A5.106.7.1 or A5.106.7.2 of CALGreen</u> for wall surfaces, as well as <u>Section 5.407.1</u>, which requires weather-resistant exterior wall and foundation envelope as required by <u>California Building Code Section 1403.2</u>. Construction must also meet requirements contained in <u>Title 24, Part 6, which vary by material of the exterior walls (see Title 24, Part 6 Compliance Manual, Part 3.2.3).</u></p> <p>Demising (Interior) Walls: Mandatory insulation requirements for demising walls (which separate conditioned from non-conditions space) differ by the type of wall material used (<u>Title 24, Part 6 Compliance Manual Part 3.2.4).</u></p> <p>Door Insulation: Mandatory requirements for air infiltration rates to improve insulation efficiency; they differ according to the type of door (<u>Title 24, Part 6 Compliance Manual Part 3.2.5).</u></p> <p>Flooring Insulation: Mandatory requirements for insulation that depend on the material and location of the flooring (<u>Title 24, Part 6 Compliance Manual Part 3.2.6).</u></p>
<u>Finish Materials</u>	<u>CALGreen</u>	The Project must comply with pollutant control requirements for finish materials. For example, materials including adhesives, sealants, caulks, paints and coatings, carpet systems, and composite wood products must meet requirements in CALGreen to ensure pollutant control (<u>CALGreen Section 5.504.4).</u>
<u>Wet Appliances (Toilets/Faucets/Urinal, Dishwasher/Clothes Washer, Spa and Pool/Water Heater)</u>	<u>CALGreen, California Energy Code, Appliance Efficiency Regulations (Title 20 Standards)</u>	<p>Wet appliances associated with the Project must meet various efficiency requirements. For example:</p> <p>Pool: Use associated with the Project is subject to appliance efficiency requirements for service water heating systems and equipment and spa and pool heating systems and equipment (<u>Title 24, Part 6, Sections 110.3, 110.4, 110.5; Title 20 Standards, Sections 1605.1(g), 1605.3(g); see also California Energy Code).</u></p> <p>Toilets/Faucets/Urinals: Use associated with the Project is subject to new maximum rates for toilets, urinals, and faucets effective January 1, 2016 (<u>Title 20 Standards, Sections 1605.1(h),(i) 1065.3(h),(i);</u></p> <ul style="list-style-type: none"> ■ <u>Showerheads maximum flow rate 2.5 gallons per minute (gpm) at 80 pounds per square inch (psi)</u> ■ <u>Wash fountains 2.2 x (rim space in inches/20) gpm at 60 psi</u> ■ <u>Metering faucets 0.25 gallons per cycle</u> ■ <u>Lavatory faucets and aerators 1.2 gpm at 60 psi</u> ■ <u>Kitchen faucets and aerators 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi</u> ■ <u>Public lavatory faucets 0.5 gpm at 60 psi</u>

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<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
		<p>■ Trough-type urinals 16 inches length</p> <p>■ Wall mounted urinals 0.125 gallons per flush</p> <p>■ Other urinals 0.5 gallons per flush</p> <p>Water Heaters: Use associated with the Project is subject to <u>appliance efficiency requirements for water heaters (Title 20 Standards, Sections 1605.1(f), 1605.3(f)).</u></p> <p>Dishwasher/Clothes Washer: Use associated with the Project is <u>subject to appliance efficiency requirements for dishwashers and clothes washers (Title 20 Standards, Sections 1605.1(o),(p),(q), 1605.3(o),(p),(q)).</u></p>
<u>Dry Appliances (Refrigerator/Freezer, Heater/Air Conditioner, Clothes Dryer)</u>	<u>Title 20 Standards CALGreen Code</u>	<p>Dry appliances associated with the Project must meet various <u>efficiency requirements. For example:</u></p> <p>Refrigerator/Freezer: Use associated with the Project is subject to <u>appliance efficiency requirements for refrigerators and freezers (Title 20 Standards, Sections 1605.1(a), 1605.3(a)).</u></p> <p>Heater/Air Conditioner: Use associated with the Project is subject to <u>appliance efficiency requirements for heaters and air conditioners (Title 20 Standards, Sections 1605.1(b),(c),(d),(e), 1605.3(b),(c),(d),(e) as applicable).</u></p> <p>Clothes Dryer: Use associated with the Project is subject to <u>appliance efficiency requirements for clothes dryers (Title 20 Standards, Section 1605.1(q)).</u></p>
	<u>CALGreen Code</u>	<u>Installations of heating, ventilation, and air conditioning; refrigeration and fire suppression equipment must comply with CALGreen Sections 5.508.1.1 and 508.1.2, which prohibits CFCs, halons, and certain HCFCs and HFCs.</u>
<u>Lighting</u>	<u>Title 20 Standards</u>	<p>Lighting associated with the Project are subject to <u>energy efficiency requirements contained in Title 20 Standards.</u></p> <p>General Lighting: Indoor and outdoor lighting associated with the Project must comply with <u>applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(j),(k),(n), 1605.3(j),(k),(n)).</u></p> <p>Emergency Lighting and Self-Contained Lighting: Project must also comply with <u>applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(l), 1605.3(l)).</u> Emergency Lighting and Self-Contained Lighting: Project must also comply with <u>applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(l), 1605.3(l)).</u></p> <p>Traffic Signal Lighting: For any necessary Project improvements involving traffic lighting, traffic signal modules and traffic signal lamps will need to comply with <u>applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(m), 1605.3(m)).</u></p>
	<u>California Energy</u>	<u>Lighting associated with the Project will also be subject to energy efficiency requirements contained in Title 24, Part 6, which contains</u>

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<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
	<u>Code</u>	<p>energy standards for non-residential indoor lighting and outdoor lighting (see Title 24 Part 6 Compliance Manual, at Sections 5, 6).</p> <p>Mandatory lighting controls for indoor lighting include, for example, regulations for automatic shut-off, automatic daytime controls, demand responsive controls, and certificates of installation (Title 24 Part 6 Compliance Manual at Section 5).</p> <p>Regulations for outdoor lighting include, for example, creation of lighting zones, lighting power requirements, a hardscape lighting power allowance, requirements for outdoor incandescent and luminaire lighting, and lighting control functionality (Title 24 Part 6 Compliance Manual Section 6).</p>
	<u>AB 1109</u>	<p>Lighting associated with the Project will be subject to energy efficiency requirements adopted pursuant to AB 1109.</p> <p>Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting to reduce electricity consumption 25% for indoor commercial lighting.</p>
<u>Bicycle and Vehicle Parking</u>	<u>CALGreen Code</u>	The Project will be required to provide compliant bicycle parking, fuel-efficient vehicle parking, and electric vehicle (EV) charging spaces (CALGreen Code Sections 5.106.4, 5.106.5.1, 5.106.5.3).
	<u>California Energy Code</u>	The Project is subject to parking requirements contained in Title 24, Part 6. For example, parking capacity is to meet but not exceed minimum local zoning requirements, and the Project should employ approved strategies to reduce parking capacity (Title 24, Part 6, Section 106.6).
<u>Landscaping</u>	<u>CALGreen Code</u>	<p>CALGreen requires and has further voluntary provisions for the following:</p> <ul style="list-style-type: none"> ■ A water budget for landscape irrigation use ■ For new water service, separate meters or submeters must be installed for indoor and outdoor potable water use for landscaped areas of 1,000 to 5,000 square feet ■ Provide water-efficient landscape design that reduces use of potable water beyond initial requirements for plant installation and establishment
	<u>Model Water Efficient Landscaping Ordinance</u>	The model ordinance promotes efficient landscaping in new developments and establishes an outdoor water budget for new and renovated landscaped areas that are 500 square feet or larger (CCR, Title 23, Division 2, Chapter 2.7).
<u>Refrigerants</u>	<u>CARB Management of High GWP Refrigerants for Stationary Sources</u>	Any refrigerants associated with the Project would be subject to CARB standards. CARB's Regulation for the Management of High GWP Refrigerants for Stationary Sources reduces emissions of high-GWP refrigerants from leaky stationary, non-residential refrigeration equipment; reduces emissions resulting from the installation and servicing of stationary refrigeration and air conditioning appliances using high-GWP refrigerants; and requires verification GHG emission

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<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
		<u>reductions (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.).</u>
<u>Consumer Products</u>	<u>CARB High GWP GHGs in Consumer Products</u>	<u>All consumer products associated with the Project will be subject to CARB standards. CARB's consumer products regulations set VOC limits for numerous categories of consumer products, and limits the reactivity of the ingredients used in numerous categories of aerosol coating products (CCR, Title 17, Division 3, Chapter 1, Subchapter 8.5).</u>
<u>CONSTRUCTION</u>		
<u>Use of Off-Road Diesel Engines, Vehicles, and Equipment</u>	<u>CARB In-Use Off-Road Diesel Vehicle Regulation</u>	<p><u>Any relevant vehicle or machine use associated with the Project will be subject to CARB standards.</u></p> <p><u>The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; restricts the adding of older vehicles into fleets starting on January 1, 2014; and requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits).</u></p> <p><u>The requirements and compliance dates of the Off-Road Regulation vary by fleet size, as defined by the regulation.</u></p>
<u>Greening New Construction</u>	<u>CALGreen Code</u>	<u>All new construction, including the Project, must comply with CALGreen, as discussed in more detail throughout this table. Adoption of the mandatory CALGreen standards for construction has been essential for improving the overall environmental performance of new buildings; it also sets voluntary targets for builders to exceed the mandatory requirements.</u>
<u>Construction Waste</u>	<u>CALGreen Code</u>	<u>The Project would be subject to CALGreen requirements for construction waste reduction, disposal, and recycling, such as a requirement to recycle and/or salvage for reuse a minimum of 50% of the non-hazardous construction waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3, or meet a local construction and demolition waste management ordinance, whichever is more stringent.</u>
<u>SOLID WASTE</u>		
<u>Solid Waste Management</u>	<u>Landfill Methane Control Measure</u>	<p><u>Waste associated with the Project would be disposed of per state requirements for landfills, material recovery facilities, and transfer stations. Per the statewide GHG emissions inventory, the largest emissions from waste management sectors come from landfills and are in the form of methane (CH₄).</u></p> <p><u>In 2010, CARB adopted a regulation that reduces emissions from CH₄ in landfills, primarily by requiring owners and operators of certain uncontrolled municipal solid waste landfills to install gas collection and control systems, and requires existing and newly installed gas and control systems to operate in an optimal manner. The regulation allows local air districts to voluntarily enter into a memorandum of understanding with CARB to implement and enforce the regulation</u></p>

<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
		and to assess fees to cover costs of implementation.
	<u>Mandatory Commercial Recycling (AB 341)</u>	<p>AB 341 will require the Project, if it generates 4 cubic yards or more of commercial solid waste per week, to arrange for recycling services using one of the following: self-haul, subscribe to a hauler, arrange for pickup of recyclable materials, or subscribe to a recycling service that may include mixed waste processing that yields diversion results comparable to source separation.</p> <p>The Project will also be subject to local commercial solid waste recycling programs required to be implemented by each jurisdiction under AB 341.</p>
	<u>CALGreen Code</u>	The Project will be subject to CALGreen requirements to provide areas that serve the entire building and are identified for depositing, storing, and collecting nonhazardous materials for recycling (CALGreen Code Section 5.410.1).
<u>ENERGY USE</u>		
<u>Renewable Energy</u>	<u>California RPS (SB X1-2, SB 350, SB 100, and SB 1020)</u>	<p>Energy providers associated with the Project will be required to comply with the RPS set by SB X1 2, SB 350, and SB 100.</p> <p>SB X1 2 required investor-owned utilities, publicly owned utilities, and electric service providers to increase purchases of renewable energy such that at least 33% of retail sales are procured from renewable energy resources by December 31, 2020. In the interim, each entity was required to procure an average of 20% of renewable energy for the period of January 1, 2011 through December 31, 2013; and were required to procure an average of 25% by December 31, 2016, and 33% by 2020.</p> <p>SB 350 requires retail sellers and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030.</p> <p>SB 100 increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045.</p> <p>SB 1020 built on the standards set forth in SB 100, establishing that 90% of the retail sales of electricity must be carbon free by 2035, 95% must be carbon free by 2040, and, as stated in SB 100, 100% must be carbon free by 2045.</p>
	<u>Million Solar Roofs Program (SB1)</u>	As part of Governor Schwarzenegger's Million Solar Roofs Program, California set a goal to install 3,000 megawatts of new solar capacity through 2016. The Million Solar Roofs Program is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time.
	<u>California Solar</u>	Multifamily properties qualify for rebates of up to \$800,000 on solar

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<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
	<u>Initiative-Thermal Program</u>	<u>water heating systems and eligible solar pool heating systems qualify for rebates of up to \$500,000. Funding for the California Solar Initiative –Thermal program comes from ratepayers of Pacific Gas & Electric, SCE, Southern California Gas Company, and San Diego Gas & Electric. The rebate program is overseen by the CPUC as part of the California Solar Initiative.</u>
<u>VEHICULAR/MOBILE SOURCES</u>		
<u>General</u>	<u>SB 375 and RTP/SCS</u>	<u>The Project complies with, and is subject to, the San Joaquin Council of Governments RTP/SCS adopted in 2022, as shown in Table 3.7-7 below.</u>
<u>Fuel</u>	<u>Low Carbon Fuel Standard (LCFS)/ EO S-01-07</u>	<u>Auto trips associated with the Project will be subject to the Low Carbon Fuel Standard (EO S-01-07), which required a 10% or greater reduction in the average fuel carbon intensity by 2020 with a 2010 baseline for transportation fuels in California regulated by CARB. The program establishes a strong framework to promote the low carbon fuel adoption necessary to achieve the Governor’s 2030 and 2050 GHG goals.</u>
<u>Automotive Refrigerants</u>	<u>CARB Regulation for Small Containers of Automotive Refrigerant</u>	<u>Vehicles associated with the Project will be subject to CARB’s Regulation for Small Containers of Automotive Refrigerant (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.). The regulation applies to the sale, use, and disposal of small containers of automotive refrigerant with a GWP greater than 150. The regulation achieves emission reductions through implementation of four requirements: use of a self-sealing valve on the container, improved labeling instructions, a deposit and recycling program for small containers, and an education program that emphasizes best practices for vehicle recharging. This regulation went into effect on January 1, 2010, with a 1-year sell-through period for containers manufactured before January 1, 2010. The target recycle rate was initially set at 90%, and rose to 95% beginning January 1, 2012.</u>
<u>Light-Duty Vehicles</u>	<u>AB 1493 (or the Pavley Standard)</u>	<u>Cars that drive to and from the Project will be subject to AB 1493, which directed CARB to adopt a regulation requiring the maximum feasible and cost-effective reduction of GHG emissions from new passenger vehicles. Pursuant to AB 1493, CARB adopted regulations that established a declining fleet average standard for CO₂, CH₄, N₂O, and HFCs (air conditioner refrigerants) in new passenger vehicles and light-duty trucks beginning with the 2009 model year and phased-in through the 2016 model year. These standards were divided into those applicable to lighter and those applicable to heavier portions of the passenger vehicle fleet.</u> <u>The regulations will reduce “upstream” smog-forming emissions from refining, marketing, and distribution of fuel.</u>
	<u>Advanced Clean Car and ZEV Programs</u>	<u>Cars that drive to and from the Project will be subject to the Advanced Clean Car and ZEV Programs. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles (ZEVs) into a single package of standards called Advanced Clean Cars. By 2025, new automobiles will emit 34% less global warming gases</u>

<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
		<p>and 75% less smog-forming emissions.</p> <p>The ZEV Program will act as the focused technology of the Advanced Clean Cars Program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018–2025 model years.</p> <p>The Advanced Clean Cars II (ACC II) regulation builds on the Advanced Clean Cars (ACC) rule adopted in 2012. ACC II decreases emissions by increasing EV sales via two programs. First, the under the ZEV program, original equipment manufacturers (OEMs) must increase sales of ZEV vehicles from 35 percent in 2026 to 100 percent in 2035. Second, ACC II further strengthened the LEV program discussed above, with more stringent emission standards beginning with model year 2025.</p>
	<u>Tire Inflation Regulation</u>	Cars that drive to and from the Project will be subject to the CARB Tire Inflation Regulation, which took effect on September 1, 2010, and applies to vehicles with a gross vehicle weight rating of 10,000 pounds or less. Under this regulation, automotive service providers must, inter alia, check and inflate each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service, to keep a copy of the service invoice for a minimum of 3 years, and to make the vehicle service invoice available to the CARB or its authorized representative upon request.
	<u>EPA and NHTSA GHG and CAFÉ standards.</u>	Mobile sources that travel to and from the Project site would be subject to EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200).
<u>Medium-and Heavy-Duty Vehicles</u>	<u>CARB In-Use On-Road Heavy-Duty Diesel Vehicles Regulation (Truck and Bus Regulation)</u>	<p>Any heavy-duty trucks associated with the Project will be subject to CARB standards. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The regulation applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds.</p> <p>To further reduce emissions, the Advanced Clean Truck Act (ACT) requires original equipment manufacturers of medium- and heavy-duty vehicles to sell ZEVs or near-zero-emissions vehicles (NZEVs) such as plug-in electric hybrids as an increasing percentage of their annual sales from 2024 to 2035. The ACT includes a cap-and-trade system, capping the number of fossil fuel vehicles sold by stipulating annual sales percentage requirements. Manufacturers can comply with the ACT by generating compliance credits through the sale of ZEVs or NZEVs or through the trading of compliance credits.</p>
	<u>CARB In-Use Off-Road Diesel Vehicle</u>	Any relevant vehicle or machine use associated with the Project will be subject to CARB standards.

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<u>PROJECT COMPONENT</u>	<u>APPLICABLE LAWS/REGULATIONS</u>	<u>GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT</u>
	<u>Regulation</u>	<p>The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulations impose limits on idling, require a written idling policy, and require a disclosure when selling vehicles; require all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; restricted the adding of older vehicles into fleets starting on January 1, 2014; and require fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits).</p> <p>The requirements and compliance dates of the Off-Road regulation vary by fleet size, as defined by the regulation.</p>
	<u>Heavy-Duty Vehicle GHG Emission Reduction Regulation</u>	Any relevant vehicle or machine use associated with the Project will be subject to CARB standards. The CARB Heavy-Duty Vehicle GHG Emission Reduction Regulation applies to heavy-duty tractors that pull 53-foot or longer box-type trailers (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.). Fuel efficiency is improved through improvements in tractor and trailer aerodynamics and the use of low rolling resistance tires.
	<u>EPH and NHTSA GHG and CAFÉ standards.</u>	Mobile sources that travel to and from the Project site would be subject to EPA and NHTSA GHG and CAFE standards for medium-and heavy-duty vehicles (76 FR 57106–57513).
<u>WATER USE</u>		
<u>Water Use Efficiency</u>	<u>Emergency State Water Board Regulations</u>	Water use associated with the Project will be subject to emergency regulations. On May 18, 2016, partially in response to EO B-27-16, the State Water Board adopted emergency water use regulations (CCR, title 23, Section 864.5 and amended and re-adopted Sections 863, 864, 865, and 866). The regulation directs the State Water Board, Department of Water Resources, and CPUC to implement rates and pricing structures to incentivize water conservation, and calls upon water suppliers, homeowner's associations, California businesses, landlords and tenants, and wholesale water agencies to take stronger conservation measures.
	<u>SB X7-7</u>	Water provided to the Project will be affected by SB X7-7's requirements for water suppliers. SB X7-7, or the Water Conservation Act of 2009, requires all water suppliers to increase water use efficiency. It also requires, among other things, that the Department of Water Resources, in consultation with other state agencies, develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies.
	<u>CALGreen Code</u>	The Project is subject to CALGreen's water efficiency standards, including a required 20% mandatory reduction in indoor water use (CALGreen Code, Division 4.3).
	<u>California RPS</u>	Electricity usage associated with Project water and wastewater

The Project's short-term construction-related and long-term operational GHG emissions were estimated using the California Emission Estimator Model (CalEEMod)TM (v.2022.1). CalEEMod is a

~~statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO₂-equivalent units of measure (i.e., MT CO₂e), based on the global warming potential of the individual pollutants.~~

SHORT-TERM CONSTRUCTION GHG EMISSIONS

The Project's short-term construction-related and long-term operational GHG emissions were estimated using the California Emission Estimator Model (CalEEMod)TM (v.2022.1). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO₂-equivalent units of measure (i.e., MT CO₂e), based on the global warming potential of the individual pollutants.

Estimated maximum GHG emissions associated with construction of the proposed Project are summarized in Table 3.7-23. These emissions include all worker vehicle, vendor vehicle, hauler vehicle, and off-road construction vehicle GHG emissions. For the purposes of this analysis, based on input from the Project applicant, the proposed Project is assumed to commence construction in 2025 and finish in 2028. See Appendix B for further detail.

TABLE 3.7-23: TOTAL CONSTRUCTION GHG EMISSIONS (MT CO₂E/YEAR)

YEAR	BIO- CO ₂	NON-BIO- CO ₂	TOTAL CO ₂	CH ₄	N ₂ O	CO ₂ E
2025	0	1,074	1,074	0.03	0.06	1,093
2026	0	1,353	1,353	0.03	0.10	1,385
2027	0	1,111	1,111	0.03	0.08	1,137
2028	0	28.0	28.0	<0.01	<0.01	28.2
Total	0	3,566	3,566	0.09	0.24	3,643

SOURCES: CalEEMod (v.2022.1)

As presented in the table, short-term construction emissions of GHGs are estimated to be a total of approximately 3,643 MT CO₂e.

OPERATIONAL GHG EMISSIONS

The operational GHG emissions estimate for the proposed Project includes on-site area, energy, mobile, waste, and water emissions. Estimated GHG emissions associated with operation of the proposed Project are summarized in Table 3.7-34, below. It should be noted that CalEEMod does not account for Governor Newsom's Zero-Emission by 2035 Executive Order (N-79-20), which requires that all new cars and passenger trucks sold in California be zero-emission vehicles by 2035; CalEEMod also does not account for the new CARB rules related to truck electrification (e.g. Advanced Clean Trucks Regulation). This is anticipated to substantially reduce the operational emissions associated with vehicles (i.e., mobile emissions) over time. The operational emissions

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results provided in Table 3.7-~~3~~4 are likely an overestimate for mobile emissions, given the state's ongoing effort to increase electric vehicles and trucks. As shown in the following tables (Table 3.7-~~3~~4 and Table 3.7-~~4~~5), the annual GHG emissions associated with the proposed Project would be approximately 16,118 MT CO₂e under the unmitigated scenario, and 16,103 MT CO₂e under the mitigated scenario (i.e. with implementation of the mitigation measures provided in *Section 3.3: Air Quality* of the Draft EIR).

It should be noted that the mitigated emissions in Table 3.7-5 do not account for Mitigation Measure 3.13-1 (see Section 3.13: Transportation and Circulation), since the exact TDM measures that would be implemented are not known at this time; therefore, mitigated GHG emissions are anticipated to be even lower than those as shown in Table 3.7-5. Moreover, it should also be noted that the emissions results in Table 3.7-5 also do not account for potential additional sustainability measures that may be incorporated into the proposed Project, such as increased energy efficiency standards that may apply by the time the proposed Project is developed, beyond what was modeled (such as more stringent, future Title 24 building envelope energy efficiency standards), as well as solar power that would be required to be included on-site (also under the Title 24 standards) and emissions reductions associated electric vehicle charging infrastructure (as also required under the Title 24 standards). Therefore, the GHG emissions results provided in Table 3.7-5 provide a highly conservative estimate of Project-related mitigated GHG emissions.

TABLE 3.7-~~34~~4: OPERATIONAL GHG EMISSIONS AT BUILDOUT (METRIC TONS/YEAR) - UNMITIGATED

	BIO- CO ₂	NON-BIO- CO ₂	TOTAL CO ₂	CH ₄	N ₂ O	CO ₂ E
Area	0	17.5	17.5	<0.01	<0.01	17.5
Energy	0	3,075	3,075	0.35	0.02	3,091
Mobile	0	12,728	12,728	0.58	0.64	12,950
Waste	0	0	0	0	0	0
Water	0	56.7	56.7	0.01	<0.01	57.3
Refrig.	0	0	0	0	3.06	3.06
Total	0	15,877	15,877	0.94	0.66	16,118

SOURCES: CALEEMOD (v.2022.1)

TABLE 3.7-~~45~~5: OPERATIONAL GHG EMISSIONS AT BUILDOUT (METRIC TONS/YEAR) - MITIGATED

	BIO- CO ₂	NON-BIO- CO ₂	TOTAL CO ₂	CH ₄	N ₂ O	CO ₂ E
Area	0	0	0	0	0	0
Energy	0	3,076	3,076	0.35	0.02	3,092
Mobile	0	12,728	12,728	0.58	0.64	12,950
Waste	0	0	0	0	0	0
Water	0	56.7	56.7	0.01	<0.01	57.3
Refrig.	0	0	0	0	3.06	3.06
Total	0	15,862	15,862	0.94	0.66	16,103

SOURCES: CALEEMOD (v.2022.1)

Based on the highly conservative estimate of 16,103 MT CO₂e at Project buildout, and based on the estimated 4,169 to 4,416 residents that are anticipated to be generated by the proposed Project (as provided in Section 3.10: Land Use, Population, and Housing), per capita GHG emissions associated with the proposed Project would be approximately 3.86 MT CO₂e per capita. Although year 2020

has come and gone, and a per capita GHG emissions target is no longer relevant for individual CEQA projects,⁹ it should be noted that this value compares favorably with the Stockton CAP's per capita goals of to 6.8 MT/person in 2020.

CONSISTENCY WITH 2022 SCOPING PLAN

In accordance with AB 32, the CARB developed the first Scoping Plan in 2008 to outline the State's strategy to achieve 1990 level emissions by year 2020. In May 2014, the CARB released and adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012. A newer version of the Scoping Plan was then adopted by the CARB in December 2017 (entitled *California's 2017 Climate Change Scoping Plan*). Lastly, the most recent version of the Scoping Plan was adopted by the CARB in November 2022 (entitled *Final 2022 Scoping Plan for Achieving Carbon Neutrality*), which was designed consistent with the long-term GHG reduction targets embedded in AB 1279. Since adoption of the 2008 Scoping Plan and the subsequent updates in 2014, 2017, and 2022, State agencies have adopted programs identified in the plan, and the Legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Building Standards (e.g., CALGreen and the 2022 Building and Energy Efficiency Standards), zero carbon electricity by 2045, and changes in the corporate average fuel economy standards (e.g., Pavley I and California Advanced Clean Cars)).

The CARB's 2022 Scoping Plan (the latest version of the Scoping Plan) provides policies that are considered needed to meet the State's mid-term and long-term GHG emissions reduction targets. Specifically, the CARB's *Final 2022 Scoping Plan* identifies that it "...lays out the sector-by-sector roadmap for California, the world's fifth largest economy, to achieve carbon neutrality by 2045 or earlier...". The Scoping Plan addresses recent legislation and direction from Governor Newsom, by extending and expanding upon the earlier Scoping Plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, and adding carbon neutrality as a science-based guide and touchstone for California's climate work. The Scoping Plan is therefore consistent with the AB 1279 GHG reduction targets of achieving carbon neutrality by 2045, and reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. The Project's consistency with the applicable 2022 Scoping Plan policies is discussed in Table 3.7-56, below.

TABLE 3.7-56: PROJECT CONSISTENCY WITH THE 2022 SCOPING PLAN

TABLE 1 OF APPENDIX D OF THE SCOPING PLAN	
<i>POLICY</i>	<i>PROJECT CONSISTENCY</i>
Transportation Electrification	
Convert local government fleets to ZEVs and provide EV charging at public sites	No Conflict. This goal is not applicable to an individual residential development project.
Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer	

⁹ Refer to the *Golden Door Properties, LLC v. County of San Diego* case.

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education, preferential parking policies, and ZEV readiness plans)	
VMT Reduction	
Reduce or eliminate minimum parking standards	No Conflict. Although this goal is not applicable to an individual residential development project, the Project is implementing neighborhood design improvements such as pedestrian network improvements and traffic calming measures. Furthermore, the proposed Project would enable walkable development.
Implement Complete Streets policies and investments, consistent with general plan circulation element requirements	
Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.	
Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking	
Implement parking pricing or transportation demand management pricing strategies	
Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood)	
Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert “greenfield” land to urban uses (e.g., green belts, strategic conservation easements)	
Building Decarbonization	
Adopt all-electric new construction reach codes for residential and commercial uses	No Conflict. Although this goal is not applicable to an individual residential development project, the Project would be consistent with the applicable Title 24 Building Envelope Energy Efficiency Standards, which ensure highly energy efficient development. Additionally, the proposed Project would utilize electricity from PG&E, which has been increasing its overall supply of renewable energy as part of its overall energy portfolio, consistent with the State’s Renewable Portfolio Standard. More detail is provided under Impact 3.7-2, below.
Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers)	
Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances	
Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	
Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings)	
TABLE 3 OF APPENDIX D OF THE SCOPING PLAN	
POLICY	PROJECT CONSISTENCY

Transportation Electrification	
<u>Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval</u>	No Conflict. The Project would provide electric conduit to the Project garage area(s), to provide for the addition of electric charging equipment. Although the EV charging is not anticipated to meet the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval, the Project would be ready for installation of such EV charging stations in the future.
VTM Reduction	
<u>Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)</u>	No Conflict. The Project is surrounded by existing residential development to the west. Additionally, the Project redevelops previously undeveloped land that is presently served by existing utilities and essential public services.
<u>Does not result in the loss or conversion of natural and working lands</u>	Conflict. Development of the proposed Project would result in the permanent conversion of 23.12 acres of Prime Farmland, 217.79 acres of Farmland of Statewide Importance, and 7.51 acres of Farmland of Local Importance to non-agricultural use. However, the Project would implement Mitigation Measure 3.2-1, which requires the Project applicant to participate in the City's Agricultural Lands Mitigation Program, under which developers of the property are required to contribute agricultural mitigation land or to pay the Agricultural Land Mitigation Fee to the City. Nevertheless, the Project could still lead to a net loss or conversion of natural and working lands.
<u>Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or</u> <u>Is in proximity to existing transit stops (within a half mile), or</u> <u>Satisfies more detailed and stringent criteria specified in the region's SCS</u>	No Conflict. The proposed Project's High Density Residential land uses inside the downtown core and inside the greater downtown would exceed 20 units per acre, consistent with this policy. Refer to Chapter 2.0: Project Description, for further detail. Moreover, the proposed Project would not disrupt an existing transit facility or service, and would not interfere with the implementation of future transit service that may be within ½ mile.
<u>Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or</u> <u>For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.</u>	Conflict. The proposed Project would not reduce parking requirements consistent with this policy, or require parking costs to be unbundled from costs to rent or own a residential unit, for multifamily development.

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<u>At least 20 percent of units included are affordable to lower-income residents</u>	Conflict. Development of the proposed Project is not anticipated to result in at least 20 percent of units included to be affordable to lower-income residents.
Building Decarbonization	
<u>Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking</u>	No Conflict. The Project is all-electric. That is, natural gas would not be used for appliances, nor does the Project use propane or other fossil fuels for space heating, water heating, or indoor cooking. ¹

SOURCE: 2022 SCOPING PLAN, TABLE 1 AND TABLE 3, APPENDIX D

NOTE: CORRESPONDENCE WITH TREVOR SMITH, LAZARES COMPANIES ON MAY 20, 2025.

It should be noted that, in reference to Table 3 of Appendix D of the Scoping Plan, as stated on page 23 and 24 of Appendix D of the Scoping Plan:

“Lead agencies may determine, with adequate additional supporting evidence that projects that incorporate some, but not all, of the key project attributes [within Table 3 of Appendix D] are consistent with the State’s climate goals.”

The proposed Project implements several of the key project attributes that are consistent with the State’s climate goals, specifically relating to transportation electrification and building decarbonization (refer to the policy analysis for Table 3 of Appendix D of the Scoping Plan, in Table 3.7-6, above). Therefore, based on this, as well as additional evidence provided throughout this analysis, the proposed Project is considered consistent with the State’s climate goals. Moreover, it should be noted that the Project includes Mitigation Measure 3.13-1, which implementation of feasible Transportation Demand Management (TDM) strategies, which would decrease the VMT generated by the Project (refer to Section 3.13: Transportation and Circulation, of this EIR, for further detail).

The proposed Project’s operational emissions would be reduced as regulations are implemented by the CARB and other State agencies to comply with the statewide GHG reduction targets. Many of these regulations are already identified in the 2022 Scoping Plan. These statewide actions are anticipated to reduce operational GHG emissions even further below those identified in Table 3.7-23, Table 3.7-34, and Table 3.7-45. For example, the proposed Project’s transportation emissions would be expected to decline as vehicle efficiency standards are implemented beyond the Advanced Clean Cars II program and the Low Carbon Fuel Standard is strengthened. Furthermore, CalEEMod does not account for Governor Newsom’s Zero-Emission by 2035 Executive Order (N-79-20) or CARB’s subsequent regulations, which requires that all new cars and passenger trucks sold in California be zero-emission vehicles by 2035. This is anticipated to substantially reduce the operational emissions associated with passenger vehicles (i.e. mobile emissions) further, over time.

The proposed Project would also benefit from the electrification of the vehicle fleet that would occur by the assumed Project buildout year and over the life of the Project. Based on estimates provided by the CEC, 5 million zero-emission electric vehicles will be needed by 2030 to meet the State’s goal of reducing GHG emissions by 40% below 1990 levels, and 8 million zero emission vehicles are anticipated to be needed by 2030 to meet the requirements embedded in Executive

Order N-79-20.¹⁰ Therefore, it can be reasonably projected that a substantial reduction in GHGs associated with the electrification of the vehicle fleet by Project operational year would occur, beyond what has been modeled within this EIR.

Separately, the proposed Project would be required to comply with the latest (i.e. 2022) version of the Title 24 standards, which are more stringent than the 2019 Title 24 standards that are modeled in CalEEMod.¹¹ Therefore, proposed Project emissions would continue to decline beyond the buildout year due to regulations that would indirectly affect Project emissions. Moreover, the Title 24 standards are anticipated to be revised again in the latter half of year 2025, with even stricter energy efficiency and renewable energy requirements for new development, which help to ensure that new development is consistent with the State's GHG reduction goals, consistent with the Scoping Plan.¹² These improvements to the Title 24 standards will be reflected in per capita GHG emission reductions at the Project buildout.

Overall, the proposed Project would not conflict with the 2022 Scoping Plan. The proposed Project would be developed according to the latest State and federal regulatory requirements, including those associated with operational building energy efficiency. Therefore, the Project would be considered consistent with the 2022 Scoping Plan. Based on this, recognizing the CARB as an authoritative substantial evidence source in evaluating post-2020 GHG impacts, since the proposed Project would be consistent with the CARB's 2022 Scoping Plan, buildout of the proposed Project would not interfere with the main programs the CARB has identified to support its conclusions that the State is on a trajectory to meet the 2045 GHG target. Overall, the proposed Project would not impede the 2022 Scoping Plan and would help the State to progress towards this target.

CONSISTENCY WITH SJCOG's 2022 RTP/SCS

The SJCOG's 2022 RTP/SCS includes eight policies with corresponding implementation strategies for conserving energy, maximizing mobility and accessibility, increasing safety and security, preserving the transportation system, supporting economic development, promoting interagency cooperation and public participation, maximizing cost effectiveness, and improving quality of life for residents. These strategies include similar measures to the 2022 Scoping Plan, such as supporting energy and water efficiency. The Project's consistency with the applicable 2022 RTP/SCS strategies is discussed in Table 3.7-6Z, below.

¹⁰ See Assembly Bill 2127 Electric Vehicle Charging Infrastructure Assessment: Analyzing Charging Needs to Support Zero-Emission Vehicles in 2030. Available at: <https://www.energy.ca.gov/publications/2020/assembly-bill-2127-electric-vehicle-charging-infrastructure-assessment-analyzing>

¹¹ Since the latest version of CalEEMod (v.2022.1) only accounts for the energy efficiency requirements associated with the 2019 version of Title 24, and since there is no well-established methodology for quantifying the reductions in energy consumption associated with the 2022 version of Title 24 over the 2019 version of Title 24, the CalEEMod modeling does not account for the energy efficiency improvements that would be associated with the 2022 (or future, more stringent) versions of Title 24.

¹² See: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency>

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TABLE 3.7-67: PROJECT CONSISTENCY WITH THE SJCOG'S 2022 RTP/SCS

POLICY	PROJECT CONSISTENCY
Enhance the Environment for Existing and Future Generations and Conserve Energy	<u>No Conflict</u> . The Project would utilize electricity provided by Pacific Gas & Electric (PG&E) which is required to meet the future year renewable portfolio performance standards. In addition, future development associated with Project implementation would be required to meet the applicable requirements of the 2022 (or more current) Title 24 Building Energy Efficiency Standards.
Maximize Mobility and Accessibility	<u>No Conflict</u> . The Project would support EV-ready charging spaces, consistent with the requirements of the latest version of the Title 24 Building Energy Efficiency Standards. In addition, although this Project is not a transportation improvement project, the Project is located in a city where regional transit improvements are planned. Moreover, the proposed Project would include many project features that improve mobility and accessibility, including providing pedestrian network improvements.
Increase Safety and Security	<u>No Conflict</u> . The Project would be developed using the latest State and local requirements relating to safety and security. Development of the Project site would include other uses to support and complement the proposed residential development include public utility infrastructure, public and private roadways, curb/gutters/sidewalks, other pedestrian facilities, private parking, street lighting, and street signage, which would enhance the safety and security of the site and its surroundings, by connecting to existing development.
Preserve the Efficiency of the Existing Transportation System	<u>Not applicable</u> . This is not a transportation improvement project and is therefore not applicable. The Project would not interfere with the efficiency of any existing transportation system.
Support Economic Vitality	<u>No Conflict</u> . The proposed Project would create local jobs, including construction jobs during the construction phase as well as home-based businesses during the Project's operational phase, as well as provide new consumers for local businesses, thereby supporting economic vitality.
Promote Interagency Coordination and Public Participation for Transportation Decision-Making and Planning Efforts	<u>Not applicable</u> . This is not a transportation planning or improvement project and is therefore not applicable.
Maximize the Cost Effectiveness	<u>No Conflict</u> . The proposed Project would be developed based on market demand.
Improve the Quality of Life for Residents	<u>No Conflict</u> . The proposed Project would provide additional residences, thereby improving the quality of life for the local community.

SOURCE: SJCOG 2022 RTP/SCS

As shown in Table 3.7-67, above, the Project would not conflict with any of the GHG emissions reduction strategies contained in the SJCOG's 2022 RTP/SCS. Therefore, the Project would be considered to be consistent with SJCOG's 2022 RTP/SCS.

CONSISTENCY WITH THE SJVAPCD REQUIREMENTS

The proposed Project would be required to comply with all applicable SJVAPCD (i.e., Air District) Rules and regulations. For example, Regulations and rules that may apply to the proposed Project could include Regulation VIII provides fugitive PM₁₀ dust prohibitions; Rule 8021 provides rules for PM₁₀ dust prohibition associated with construction, demolition activities, excavation, extraction, and other earthmoving activities; Rule 4601 provides rules to limit VOC emissions for architectural coatings. Moreover, the proposed Project would be required to comply with SJVAPCD Rule 9510, as described in further detail below. In sum, the proposed Project would comply with all applicable

SJVAPCD Rules and regulations and as to such rules and regulations, impacts are **less than significant**.

SJVAPCD'S RULE 9510

In accordance with the SJVAPCD's Rule 9510, an Air Impact Assessment (AIA) is required to be prepared for the proposed Project based on the applicability and exemption criteria of the rule.¹³ The rule includes general mitigation requirements for construction and/or operational emissions. Per the general mitigation requirements of Rule 9510, the Project would be required to reduce the Project's operational baseline NOx emissions 33.3%, and the Project's operational baseline PM₁₀ emissions 50%, over a period of ten years as quantified in the approved AIA. Although the purpose of Rule 9510 is to reduce NOx and PM₁₀ emissions, rather than GHG emissions, it should be noted that these reductions are enforced through on- and off-site measures, many of which would also reduce GHG emissions.

These off-site emission reductions have the ancillary benefit of reducing GHG emissions, beyond what has been modeled herein. For example, for off-site mitigation that would occur due to the replacement of older, higher-emitting agricultural tractors with new latest-tier tractors, the greenhouse gas intensity of the new latest-tier tractors compared to older, higher-emitting tractors by approximately 33-80%, according to the U.S EPA, by increasing the fuel economy of tractor trailers from approximately 5-6 mpg to 8-9 mpg in 2027.¹⁴ Although such reductions in GHGs will be attributed to the proposed Project through the Rule 9510 ISR, these reductions are not reflected in the Project GHG modeling estimates included herein, except that the modeling estimates do reflect that fact that the Project does not include any open-hearth fireplaces. It is notable, however, that the GHG reductions are projected to be substantial and are in alignment with the goals of the 2022 Scoping Plan.

EXECUTIVE ORDER S-3-05

The Executive Order S-3-05 2050 target has not been codified by legislation. However, studies have shown that, in order to meet the 2050 target, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the project's impacts further relative to the 2050 goal is speculative for purposes of CEQA.¹⁵

The CARB recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction]

¹³ Available at: <https://www.valleyair.org/rules/currentrules/r9510-a.pdf>. Accessed: March 2025.

¹⁴ See page 677 of the *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2 (Response to Comments for Joint Rulemaking)* for detail: <https://www.nhtsa.gov/sites/nhtsa.gov/files/phase2-hd-fuel-efficiency-ghg-response-to-comments.pdf>

¹⁵ California Air Resources Board (CARB). 2014. First Update to the Climate Change Scoping Plan. Website: <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>. Accessed March 2023 ~~September 11, 2023~~.

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measures also put the State on a path to meet the long-term 2050 goal of reducing California’s GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate.” In addition, the CARB’s First Update to the Scoping Plan “lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050,” and many of the emission reduction strategies recommended by the CARB would serve to reduce the proposed project’s post-2020 emissions level to the extent applicable by law:

- Energy Sector: Continued improvements in California’s appliance and building energy efficiency programs and initiatives, such as the State’s zero net energy building goals, would serve to reduce the proposed project’s emissions level. Additionally, further additions to California’s renewable resource portfolio would favorably influence the project’s emissions level.
- Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero-emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project’s emissions level.
- Water Sector: The project’s emissions level will be reduced as a result of further utilization of water conservation technologies.
- Waste Management Sector: Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project’s emissions level.

In his January 2015 inaugural address, Governor Brown expressed a commitment to achieve “three ambitious goals” that he wanted to see accomplished by 2030 to reduce the State’s GHG emissions:

- Increasing the State’s Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the State agencies and departments responsible for achieving the State’s environmental policy objectives, particularly those relating to global climate change.¹⁶

Further, studies show that the State’s existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.¹⁷

¹⁶ Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. April 29.

Website: <https://www.gov.ca.gov/news.php?id=18938>. Accessed February 2, 2021.

¹⁷ Energy and Environmental Economics, 2015. Pathways to Deep Carbonization in the United States. Website: <http://deepdecarbonization.org/wp->

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

CONSISTENCY WITH THE CITY OF STOCKTON CLIMATE ACTION PLAN¹⁸

The proposed Project would be consistent with the relevant GHG reduction measures associated with the City of Stockton Climate Action Plan (CAP), published in 2014. Table 3.3-78, below, provides an analysis of the consistency of the proposed Project with the GHG reduction measures contained within the CAP. As shown, the proposed Project would be consistent with all applicable GHG reduction measures that would be applicable to the proposed Project.¹⁹

TABLE 3.3-78: PROJECT CONSISTENCY WITH THE CITY OF STOCKTON CLIMATE ACTION PLAN

GHG REDUCTION MEASURE	PROJECT CONSISTENCY
DRP-1: Development Review Process – 29% Reduction for Discretionary Project	<u>Not Applicable. The Project does not need to demonstrate a 29% reduction in GHG emissions, per this measure, since this efficiency target no longer applies. Specifically, this target was included in the CAP originally, since it was part of the normal review process for projects, at the time. Refer to the description of this measure's applicability on page 3-11 of the CAP. However, the SJVAPCD no longer recommends this approach to analyzing GHGs (i.e compared to an efficiency target). Refer to the <i>Newhall Ranch and Golden Door cases</i>.^{20,21}</u>

content/uploads/2015/11/US_Deep_Decarbonization_Technical_Report_Exec_Summary.pdf. Accessed June 8, 2022.

¹⁸ This analysis of consistency with the Stockton CAP is provided for informational purposes only.

¹⁹ It should be noted that, subsequent to adoption of the CAP, the *Golden Door Properties, LLC v. County of San Diego* case held that the use of a quantitative threshold (like the year 2020 efficiency threshold included within the Stockton Climate Action Plan), which has historically been used for EIRs throughout California, must be adopted by the City via a resolution, ordinance or regulation based on a public review process, and supported by substantial evidence. However, a quantitative threshold beyond year 2020 has never been specifically adopted as a threshold by the City via a resolution, ordinance, or regulation. Therefore, overall, the usage of a per capita efficiency metric, such as the one included within the City of Stockton Climate Action Plan, is also not relevant or appropriate in a CEQA context.

²⁰ The Supreme Court's decision in *Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204 ("Newhall Ranch") determined that comparative analysis of GHG emissions could be applicable based on local or regional data of the project location. However, the court did not specify in detail what kind of comparative (quantitative) analysis would be considered adequate. An alternative way to satisfy the greenhouse gas requirements is to rely on a locally qualified CAP if it is adequately supported.

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<i>GHG REDUCTION MEASURE</i>	<i>PROJECT CONSISTENCY</i>
Energy-1: Green Building Ordinance	<u>No Conflict.</u> The Project would exceed the 2008 Title 24 of the California Code of Regulations Standards, since the most recent version of the Title 24 Standards is much more stringent. Simply meeting the current Title 24 Standards would result in significant energy and GHG savings for the City because the state has regularly updated the Title 24 requirements since 2005 and plans to continue to update the Title 24 standards periodically in the future. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Energy-2: Outdoor Lighting Upgrades for Existing Development	<u>Not applicable.</u> The proposed Project is a new development; therefore, GHG reduction measures associated with existing development would not apply.
Energy-3: Energy Efficiency Incentives and Programs to Promote Retrofits for Existing Residential Buildings	<u>Not applicable.</u> The proposed Project is a new development; therefore, GHG reduction measures associated with existing development would not apply.
Energy-4: Energy Efficiency Programs to Promote Retrofits for Existing Non- Residential Buildings	<u>Not applicable.</u> The proposed Project is a new development; therefore, GHG reduction measures associated with existing development would not apply. Moreover, the proposed Project does not include non-residential development.
Energy-5: Solar-Powered Parking	<u>No Conflict.</u> The Project would be consistent with the current Title 24 Standards associated with solar PV, <u>as applicable.</u> Therefore, the proposed Project would not conflict with this GHG reduction measure.
Energy-6: Residential and Non-residential Rooftop Solar	<u>No Conflict.</u> The Project would be consistent with the current Title 24 Standards associated with solar PV, <u>which would require that approximately 30% of residential electricity requirements are met by rooftop solar. Specifically, based on the 2022 version of the Title 24 standards, although the exact percentage of electricity generated by the PV system can vary based on factors such as the climate zone, conditioned floor area, and possible plug loads of the building, the goal is to offset the electrical consumption of the proposed building, assuming a natural gas furnace, water heater, stove, and clothes dryer.</u> Therefore, the proposed Project would not conflict with this GHG reduction measure.
Trans-1: Land Use/Transportation System Design Integration	<u>No Conflict.</u> The Project would increase density in the City of Stockton, thereby facilitating additional land use and existing transportation integration. That is, the development of the Project would increase use of existing roadways that have been designed to accommodate additional traffic, such as that as would be generated by the proposed Project. Overall, the Project land uses have been previously planned for and integrate appropriately with the existing transportation system. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Trans-2: Parking Policies	<u>Not applicable.</u> This GHG reduction measure would apply to the downtown area, which the Project is not in. Therefore, this GHG reduction measure would not apply to the proposed Project.
Trans-3: Transit System Support	<u>No Conflict.</u> The Project would not hinder the development of the City's transit system. Furthermore, the increased residential density of the area that would occur with development of the proposed Project would

²¹ More recently, in the *Golden Door Properties, LLF v. County of San Diego* ("Golden Door") case, the court indicated that, in order for a use of a quantitative threshold for GHGs to be applicable, the quantitative threshold must be adopted by the City via resolution, ordinance, or regulation, needs to undergo include a public review process, and must to be supported by substantial evidence. The City of Stockton has not adopted a quantitative threshold for GHGs beyond the year 2020 that satisfy these requirements, for future years. Therefore, the use of a quantitative threshold to analyze GHGs is not appropriate for the Project.

<i>GHG REDUCTION MEASURE</i>	<i>PROJECT CONSISTENCY</i>
	incentivize further development of local transit options, beyond which would be anticipated to occur without development of the proposed Project, simply due to the increased residential development in an area that is currently not developed. Further, Mitigation Measure 3.13-1 requires coordination with public transit agencies regarding transit service connecting workers with existing and future residential developments, and also requires coordination with SJRTD regarding the potential for increasing service on Hopper Route 93. As such, this measure aims to increase access to public transit. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Trans-4: Efficient Goods Movement	<u>Not applicable.</u> This GHG reduction measure would apply to the City's rail lines. Therefore, this GHG reduction measure would not apply to the proposed Project.
Trans-5: Reduce Barriers for Non-Motorized Travel	<u>No Conflict.</u> The Project would connect the City's existing transportation system, via pedestrian walkways (including sidewalks) and bicycle facilities, and connect with the existing system. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Trans-6: Transit System Improvements	<u>No Conflict.</u> This GHG reduction measure would apply to the City's transit system. Nevertheless, the proposed Project would be accessible via the City's existing transit system. <u>Existing bus stops are located south of the Project site, at West Lane and Morado Lane, as well as Royal Oaks Drive and Lower Sacramento Road. Furthermore, Additional bus stops may be added closer to the Project site in the future.</u> Therefore, the proposed Project would not conflict with this GHG reduction measure.
Trans-7: Safe Routes to School	<u>No Conflict.</u> The Project would connect the City's existing transportation system, via pedestrian walkways (including sidewalks). Therefore, the proposed Project would not conflict with this GHG reduction measure.
Trans-8: Transportation Demand Management and Additional Safe Routes to School	<u>No Conflict.</u> The Project would connect the City's existing Safe Routes to School. <u>Moreover, the Project would reduce VMTs through implementation of Mitigation Measure 3.13-1, which requires the Project applicant to work with the City of Stockton to implement feasible Transportation Demand Management (TDM) strategies, which would decrease the VMT generated by the Project. See Mitigation Measure 3.13-1, for further detail.</u> Therefore, the proposed Project would not conflict with this GHG reduction measure.
Waste-1: Increased Waste Diversion	<u>No Conflict.</u> The Project would be consistent with the State's 75% waste diversion goal as required by AB 341. <u>It should be noted that AB 341 has been superseded by California's SB 1383, which sets a more stringent goal of diverting 75% of the waste stream from landfills by 2025 and includes enforcement mechanisms, such as monetary fines, for non-compliance. The Project would be required to comply with SB 1383, and since AB 341 has come and gone, the Project would not conflict with requirements associated with AB 341, as the local waste haulers are required by State law to implement this measure.</u> Therefore, the proposed Project would not conflict with this GHG reduction measure.
Water-1: Comply with Senate Bill X7-7	<u>No Conflict.</u> The Project would be consistent with the State's statewide goal of a 20% reduction in urban per capita use, as required by Senate Bill X7-7. <u>Senate Bill X7-7 is a California state law that requires the state to reduce urban water consumption by 20% by the year 2020. Since the year 2020 has come and gone, the Project would not conflict with this law.</u> Therefore, the proposed Project would not conflict with this GHG reduction measure.
Water-2: Promotion of Water-Efficiency for Existing Development	<u>Not applicable.</u> This GHG reduction measure would apply only to existing development. The proposed Project does not contain any existing development; rather, it includes new development. Therefore, this GHG reduction measure would not apply to the proposed Project.

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<i>GHG REDUCTION MEASURE</i>	<i>PROJECT CONSISTENCY</i>
Wastewater-1: Energy Efficiency Improvements at the Regional Wastewater Treatment Plant	<u>No Conflict.</u> The Project would not conflict with the City's goal of reducing energy usage as the Regional Wastewater Treatment Plant. <u>The Project is not anticipated to be a large generate of wastewater demand, since it is a commercial and industrial project.</u> Additionally, the Project would not hinder energy efficiency improvements or other upgrades at the Regional Wastewater Treatment Plant. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Urban Forestry-1: Urban Tree Planting Programs	<u>No Conflict.</u> The Project would include landscaping trees that would not conflict with this GHG reduction measure.
High GWP GHG-1: Residential Responsible Appliance Disposal Programs	<u>No Conflict.</u> The Project is a new development that would install new energy-efficient refrigerators and freezers. Therefore, the proposed Project would not conflict with the goal of replacing existing inefficient sources of high global warming potential (GWP) appliances. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Off-Road-1: Electric-Powered Construction Equipment	<u>No Conflict.</u> The Project would not conflict with the City's goal of increasing the percentage of construction equipment that is electric powered. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Off-Road-2: Reduced Idling Times for Construction Equipment	<u>No Conflict.</u> The Project would be consistent with the CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling currently limits diesel-fueled commercial motor vehicle idling time to 5 minutes. Therefore, the proposed Project would not conflict with this GHG reduction measure.
Off-Road-3: Electric Landscaping Equipment	<u>No Conflict.</u> The Project would not conflict with the City's goal of 15% of the City's landscaping equipment to be electric or battery powered. Therefore, the proposed Project would not conflict with this GHG reduction measure.

SOURCE: CITY OF STOCKTON CLIMATE ACTION PLAN, 2014

CONCLUSION

The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS, ~~and the City of Stockton Climate Action Plan.~~ This would ensure that the proposed Project would be consistent with, and would not impair, the State's carbon neutrality standard by year 2045 as established under AB 1279. The State is making progress toward reducing GHG emissions in key sectors such as transportation, industry, and electricity. Since the Project would be consistent with State GHG Plans, it would not impede the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and of achieving carbon neutrality by 2045. The proposed Project would make a reasonable fair share contribution to the State's GHG reduction goals, by implementing a wide array of Project features that would substantially reduce GHG emissions and therefore, the proposed Project's GHG emissions would be considered to have a ***less than significant*** impact.

The following changes were made to pages 3.7-35 through 3.7-39 of Section 3.7 of the Draft EIR:

ELECTRICITY AND NATURAL GAS

Operation. Electricity and natural gas used by the proposed Project during operation would be used primarily to generate energy for Project buildings, as well as for outdoor parking lot lighting. As shown in further detail in the CalEEMod modeling outputs provided in Appendix B, "Energy" is one of the categories that was modeled for GHG emissions. As also shown in the CalEEMod modeling outputs as provided in Appendix B, the proposed Project is anticipated to consume approximately

11,238,093 kWh of electricity per year and approximately 9,693,520 kBTU per of natural gas per year. Moreover, this is likely a conservative estimate, given that the CalEEMod model does not account for the latest version of Title 24. Furthermore, this also does not account for the vast majority of the Project's energy efficiency commitments, which would likely drive down the energy usage much further than identified herein.

The proposed Project's buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Title 24 Energy Efficiency Standards for Residential Buildings and Green Building Code Standards. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting, are widely regarded as the some of the most advanced and stringent building energy efficiency standards in the country. In addition, the on-site solar PV system would meet the State legal requirements. As such, the design of the proposed project would facilitate the future commitment to renewable energy resources. Therefore, building energy consumption would not be considered wasteful, inefficient, or unnecessary.

Additionally, the proposed Project is anticipated to implement renewable energy features. In particular, the proposed Project would be required to implement on-site solar, consistent with the most recent (2022) Title 24 standards. The 2022 Title 24 standards require single-family homes and low-rise multi-family projects to install solar photovoltaic (PV) systems and be "battery-ready", by installing either a subpanel or a split-bus main panel with four backed-up circuits.²² This is a requirement as part of the 2022 Title 24 standards. However, it should be noted that additional on-site solar PV could be installed, especially in the case that stricter Title 24 standards come into effect prior to portions of Project development.

Separately, the 2022 Title 24 standard requires that the number of electric vehicle (EV) charging spaces depends on the building type and total number of parking spaces on-site. Similarly, such requirements would be anticipated to further reduce energy consumption beyond what is modeled herein.

Construction. Temporary electric power for as-necessary lighting and electronic equipment, such as computers inside temporary construction trailers, and water for dust control would be provided by PG&E. The electricity used for such activities would be temporary, would be substantially less than that required for Project operation, and would therefore have a negligible contribution to the Project's overall energy consumption. Natural gas is not anticipated to be required during construction of the Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "on-road and off-road vehicles" subsections. Any minor amounts of natural gas that may be consumed as a result of Project construction would be substantially less than that required for Project operation and would have a negligible contribution to the Project's overall energy consumption.

ON-ROAD VEHICLES (OPERATION)

The proposed Project would generate vehicle trips (i.e., passenger vehicles for employees and heavy-duty trucks for hauling) during its operational phase. Compliance with applicable State laws and regulations would limit idling and a part of a comprehensive regulatory framework that is

²² See: <https://calsolarinc.com/news/title-24-california/>

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implemented by the CARB. A description of Project operational on-road mobile energy usage is provided below.

According to the Traffic Study prepared for the proposed Project (WK Shijo Consulting, 2023), and as described in more detail in Section 3.13 of this EIR, the proposed Project would increase total vehicle trips by approximately 12,784 new daily trips. In order to calculate operational on-road vehicle energy usage, De Novo Planning Group used fleet mix data from the CalEEMod (v.2022.1) output for the proposed Project, and Year 2025 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2021, to derive weighted average gasoline and diesel MPG factors for the vehicle fleet as a whole. Based on these calculations, as provided in Appendix B, upon full buildout, the proposed Project would generate operational vehicle trips that would use a total of approximately 2,334 gallons of gasoline and 5,395 gallons of diesel per day, or 851,728 gallons of gasoline and 1,969,247 gallons of diesel per year. Additionally, the Project would generate operational vehicle trips that require electricity for electric vehicles, which is dependent on the number of electric vehicles within the vehicle fleet at the time of Project operation.

Over the lifetime of the Project, the fuel efficiency of the vehicles being used by the Project is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the Project site during operation would decrease over time. Numerous regulations are in place that require and encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and ZEVs in California. The Project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes, which would minimize fuel consumption. Operation of the Project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy. The Project would provide a bike-friendly, pedestrian-friendly development and facilitate ride-sharing and carpooling to reduce VMT. The Project also would encourage EVs by providing EV chargers, in compliance with CalGreen standards.

In summary, although Project implementation would result in an increase in petroleum use during construction and operation, over time vehicles would use less petroleum due to advances in fuel economy. Additionally, the Project would include features that would encourage electric and zero-emissions technology, and reduced VMT through sidewalks. Given these considerations, petroleum consumption associated with the Project would not be considered inefficient or wasteful, and impacts would be less than significant.

ON-ROAD VEHICLES (CONSTRUCTION)

The proposed Project would also generate on-road vehicle trips during Project construction (from construction workers and vendors travelling to and from the Project site). De Novo Planning Group estimated the vehicle fuel consumed during these trips based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2023 gasoline and diesel MPG factors provided by EMFAC2021 (year 2023 factors were used to represent a conservative analysis, as the energy efficiency of construction activities is anticipated to improve over time). For the sake of simplicity and to be conservative, it was assumed that all construction worker light duty passenger cars and truck trips use gasoline as a fuel source, and all medium and heavy-duty vendor trucks use diesel fuel. Table 3.7-89, below,

describes gasoline and diesel fuel consumed during each construction phase (in aggregate). As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed Project would occur during the building construction phase. See Appendix B of this EIR for a detailed accounting of construction on-road vehicle fuel usage estimates.

TABLE 3.7-89: ON-ROAD MOBILE FUEL USAGE BY PROJECT CONSTRUCTION ACTIVITIES – BY PHASE

CONSTRUCTION PHASE	TOTAL GALLONS OF GASOLINE FUEL ^(B)	TOTAL GALLONS OF DIESEL FUEL ^(B)
Site Preparation	495	0
Grading	550	0
Building Construction	7,944	4,805
Paving	687	0
Architectural Coatings	5,314	0
Total	14,990	4,805

NOTE: ^(A) PROVIDED BY CALEEMOD OUTPUT. ^(B) SEE APPENDIX B OF THIS EIR FOR FURTHER DETAIL

SOURCE: CALEEMOD (V.2022.1); EMFAC2021.

OFF-ROAD EQUIPMENT (CONSTRUCTION)

Off-road construction equipment would use diesel fuel during the construction phase of the proposed Project. A non-exhaustive list of off-road constructive equipment expected to be used during the construction phase of the proposed Project includes: forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO₂ emissions expected to be generated by the proposed Project (as provided by the CalEEMod output), and standard conversion factors (as provided by the U.S. Energy Information Administration), the proposed Project would use a total of approximately 103,905 gallons of diesel fuel for off-road construction equipment. Detailed calculations are provided in Appendix B of this EIR.

State laws and regulations would limit idling from both on-road and off-road diesel-powered equipment and are part of a comprehensive regulatory framework that is implemented by the CARB. Additionally, as a practical matter, it is reasonable to assume that the overall construction schedule and process would be designed to be as efficient as feasible in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for further future efficiency gains during construction are limited. For the foregoing reasons, it is anticipated that the construction phase of the project would not result in wasteful, inefficient, and unnecessary consumption of energy.

CONCLUSION

The proposed Project would use energy resources for the operation of Project buildings (natural gas and electricity), outdoor lighting (electricity), on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed Project, and off-road and on-road construction activities associated with the proposed Project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, including through the mitigation measures provided throughout this EIR, as well as through the implementation of statewide and local measures. The proposed Project would be responsible for conserving energy, to the extent feasible.

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The proposed Project would comply with all applicable federal, State, and local regulations regulating energy usage. For example, PG&E, the electric and natural gas provider to the proposed Project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide RPS to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E has achieved at least a 33% mix of renewable energy resources in 2020 and is on track to achieve 60% mix of renewable energy by 2030. Moreover, the Project intends to supply 100 percent of its electricity demand from renewable sources associated with a combination of onsite generation and direct source renewable purchased energy would supply a notable portion of its on-site energy via rooftop solar PV, consistent with the latest Title 24 energy efficiency standards. Specifically, the Project applicant has entered into direct source renewable purchase contracts sufficient to supply these needs. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Furthermore, the proposed Project would implement Mitigation Measures 3.13-1, which requires the Project applicant to implement feasible TDM (i.e. VMT reduction) strategies. Mitigation Measure 3.3-4 could also reduce Project-related GHG emissions, if a VERA is required. Moreover, the proposed Project would comply with the City's ~~Sustainability Action Plan~~ Climate Action Plan GHG reduction measures (as applicable), and General Plan goals, objectives and policies related to energy conservation that are relevant to this analysis, and also be consistent with the State's 2022 Scoping Plan and SJCOG's 2022 RTP/SCS.

The proposed Project would comply with all existing energy standards and would not be expected to result in significant adverse impacts on energy resources. For these reasons, the proposed Project would not cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the energy-related thresholds as described by the *CEQA Guidelines*. This is a ***less than significant*** impact.

3.8 HAZARDS AND HAZARDOUS MATERIALS

The following changes were made to page 3.8-14 of Section 3.8 of the Draft EIR:

ACTIONS: SAFETY ELEMENT

- SAF-2.2A. Require new development to provide adequate access for emergency vehicles and evacuation routes, including by designing roadway systems to provide multiple escape routes in the event of a levee failure. ~~SAF-2.6A. Restrict transport of hazardous materials within the city to routes that have been designated for such transport.~~

The following changes were made to pages 3.8-17 through 3.8-19 of Section 3.8 of the Draft EIR:

Contractors would be required to comply with CalEPA's Unified Program; regulated activities would be managed by San Joaquin County Department of Environmental Health, the designated Certified Unified Program Agency for San Joaquin County, in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California hazardous material management plans and inventories). The use, storage, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations governing the use, storage,

transportation, and disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Future construction activities could expose construction workers to accidental conditions as a result of existing potential contamination in on-site soils related to historical use of the Project site. Additionally, if hazardous materials are discovered during Project construction activities, a Soils Management Plan (SMP) would be submitted and approved by the San Joaquin County Department of Environmental Health, as required by Mitigation Measure 3.8-1. The SMP would establish management practices for handling contaminated soils and other hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. Such compliance would reduce the potential for accidental release of hazardous materials during construction of the proposed Project. As a result, it would lessen the risk of exposure of construction workers and the public to accidental release of hazardous materials, as well as the demand for incident emergency response.

The Project site consists of the Development Area (236.3 acres), Non-development Area (56.03 acres), and Right-of-Way Annexation Area (13.7 acres). The Development Area is predominantly comprised of agricultural and undeveloped uses. The Project proposes to construct a primarily residential development comprised of up to 1,411 residential units, parks/open space, and a school site within the Development Area, as well as circulation and infrastructure improvements. Future development within the Development Area would involve the conversion of active agricultural land into residential, public facility, and/or open space uses. Site grading, excavation for utilities, trenching, backfilling, and the construction of proposed structures could result in the exposure of construction workers and the general public to hazardous materials, such as pesticides and herbicides. Like most agricultural and farming operations in the Central Valley, agricultural practices in the area have used agricultural chemicals including pesticides and herbicides as a standard practice. Although no contaminated soils have been identified on the Project site or the vicinity above applicable levels, residual concentrations of pesticides may be present in soil because of historic agricultural application and storage. Continuous spraying of crops over many years can potentially result in a residual buildup of pesticides, in farm soils. Of highest concern relative to agrichemicals are chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides (OCPs), such as such as Mecoprop (MCPP), Dinoseb, chlordane, dichloro-diphenyltrichloroethane (DDT), and dichloro-diphenyl-dichloroethylene (DDE).

Mitigation Measure 3.8-2 requires evenly distributed soil samples to be conducted within the Development Area for analysis of pesticides and heavy metals prior to initiation of any ground disturbance activities. If elevated levels of pesticides or heavy metals are detected during the laboratory analysis of the soils, the Project applicant would be required to prepare and implement a soil cleanup and remediation plan prior to the commencement of grading activities. Implementation of Mitigation Measure 3.8-2 would ensure that redevelopment of the active agricultural land would not result in accidental release of or exposure to hazardous materials.

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OPERATIONAL PHASE IMPACTS

The operational phase would occur after construction is completed and business operations commence on a day-to-day basis. As previously noted, the Project proposes to construct a primarily residential development comprised of up to 1,411 residential units, parks/open space, and a school site within the Development Area, as well as circulation and infrastructure improvements. The Project does not propose uses that would involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular household maintenance of buildings and landscaping. The quantities of these materials would not typically be at an amount that would pose a significant hazard to the public or the environment. While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to reduce risk to acceptable levels. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable federal, State, and local laws and regulations would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials during the operational phase of the proposed Project would be less than significant.

CONCLUSION

Overall, consistency with federal, State, and local laws and regulations related to hazardous materials discussed above and implementation of Mitigation Measures 3.8-1 through 3.8-2 would reduce potential impacts that could occur due to the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with construction activities within the Project site to a **less than significant** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.8-1: Prior to initiating construction or grading activities, the construction contractor shall be provided with project-specific training regarding the identification and handling of hazardous materials and agency notification procedures. In the event that contaminated soils ~~hazardous materials~~ are encountered during construction, the Project applicant shall prepare and implement a Soils Management Plan (SMP) to provide guidance for the proper handling, onsite management, and disposal of impacted soil that might be encountered during construction activities shall be submitted and approved by the San Joaquin County Department of Environmental Health. The SMP shall establish management practices for handling of contaminated soils and other hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. The SMP would include, but is not limited to, an outline of how Project construction crews would identify, handle, and dispose of potentially contaminated soil; the qualifications of the appropriately trained professionals that would monitor soil conditions and conduct soil sampling during construction; laboratory testing; anticipated field screening methods and appropriate regulatory limits to be applied to determine proper handling and disposal; and requirements for documenting and reporting incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to dispose of contaminated materials. In the event that potentially contaminated soils were encountered within the footprint of construction, soils would be tested and stockpiled. The SMP shall be submitted to the San Joaquin County Department of Environmental Health for review and approval. The approved SMP shall be posted and

maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.

Mitigation Measure 3.8-2: *Prior to initiation of any ground disturbance activities, a soil sampling and analysis workplan shall be submitted to the San Joaquin County Department of Environmental Health for approval. The sampling and analysis plan shall meet the requirements of the Department of Toxic Substances Control Interim Guidance for Sampling Agricultural Properties (2008), and the County Department of Environmental Resources Recommended Soil and Groundwater Sampling for Underground Tank Investigations (2013). ~~evenly~~ Evenly distributed soil samples shall be conducted throughout the Development Area for analysis of pesticides and heavy metals. The samples shall be submitted for laboratory analysis of pesticides and heavy metals per DTSC and EPA protocols. The results of the soil sampling shall be submitted to the City of Stockton for review. ~~If elevated levels of pesticides or heavy metals are detected during the laboratory analysis of the soils, a soil cleanup and remediation plan shall be prepared and implemented prior to the commencement of grading activities.~~*

If the sampling results indicate the presence of agrichemicals that exceed commercial screening levels, a removal action workplan shall be prepared in coordination with San Joaquin County Environmental Health Department. The removal action workplan shall include a detailed engineering plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection. A no further action letter shall be issued by San Joaquin County Environmental Health Department upon completion of the removal action. The removal action shall be deemed complete when the confirmation samples exhibit concentrations below the commercial screening levels, which will be established by the agencies.

The following changes were made to pages 3.8-21 and 3.8-22 of Section 3.8 of the Draft EIR:

In San Joaquin County, all major roads are available for evacuation, depending on the location and type of emergency that arises. Primary evacuation routes within the Project site area would include Eight Mile Road, West Lane, and Lower Sacramento Road. The Project would not interfere with any emergency response plan or emergency evaluation plan, as the Project does not include any actions that would impair or physically interfere with the San Joaquin County EOP, San Joaquin County Hazardous Materials Area Plan, and the Stockton EOP. As previously stated, the Project proposes to construct a primarily residential development comprised of up to 1,411 residential units, parks/open space, and a school site within the Development Area, as well as circulation and infrastructure improvements that would result in increased connectivity of the area. Residential streets within the Development Area would be constructed according to City standards and would provide adequate access for emergency vehicles and connect to exiting major roads. Other improvements to circulation include an extension of the west-east trending Marlette Road, which would provide access to the proposed development and connect to West Lane and Lower Sacramento Road. Access to the proposed Project would not occur from Eight Mile Road, thus eliminating any conflicts with the flow of traffic on Eight Mile Road. The proposed Project includes an annexation of right-of-way along Eight Mile Road, which would be improved to City of Stockton standards.

The City of Stockton General Plan EIR concluded that development anticipated under the Envision Stockton 2040 General Plan would result in less than significant impacts relative to impacting or

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physically interfering with an adopted emergency response plan or emergency evacuation plan. As discussed in Section 3.10, Land Use, Population and Housing, while the proposed Project would result in population growth relative to existing conditions, it would not result in direct population growth beyond the City's capacity identified in the General Plan; rather, the Project would result in a reduction of the total number of units anticipated under the General Plan by approximately 662 to 741 units. Overall, the proposed Project is not anticipated to exceed the planned growth (directly or indirectly) in the area beyond what is anticipated in the City's General Plan or regional growth projections. As such, population growth associated with the Project is not anticipated to result in significant impacts or interfere with an adopted emergency response plan or emergency evacuation plan.

Future uses on the Project site will have access to the County resources that establish protocols for safe use, handling, and transport of hazardous materials. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder the emergency vehicle access or evacuation in the event of an emergency. Additionally, the proposed Project would require review and approval by the City's law enforcement and fire personnel to ensure that adequate emergency ingress and egress is provided throughout the site that would not interfere or impair evacuation plans. Therefore, impacts related to the potential for the project to impair implementation of emergency response plans would be **less than significant** impact.

Impact 3.8-56: Project implementation has the potential to expose people or structures to a risk of loss, injury, or death from wildland fires (Less than Significant)

3.9 HYDROLOGY AND WATER QUALITY

The following change was made to page 3.9-29 of Section 3.9 of the Draft EIR:

Mitigation Measure 3.9-1: *All residential and non-residential structures within the Project site shall meet the urban level of flood protection, as required by the State of California Central Valley Flood Protection Act of 2008 (Senate Bill 5). Finished floor elevations of proposed residential structures shall be elevated to or above the prescribed 200-year floodplain elevation, or proposed nonresidential structures shall be floodproofed, consistent with the City of Stockton's Criteria for Development in 200-year Floodplains and City of Stockton Municipal Code. Code compliance shall be documented in materials prepared by licensed professionals and submitted to the Community Development Director prior to issuance of grading permits.*

3.10 LAND USE, POPULATION AND HOUSING

The following change was made to pages 3.10-26 and 3.10-27 of Section 3.12 of the Draft EIR:

1. ***Plan for Services:*** The Draft EIR assesses service capacity and demands for these services in Sections 3.12, Public Services and Recreation, and 3.14, Utilities. There are not any service deficiencies noted by the City of Stockton, or contained within this EIR that are anticipated to occur after installation of infrastructure and payment of fees. See Section 3.12, Public Services and Recreation, for more information. The annexation will also include detachment from the Lincoln Fire District. The proposed annexation area is within the Stockton Water Service Area boundary and the Wastewater Service Area boundary as defined by LAFCo and the City. It is also noted that a City Services Plan would be required and prepared for the Project to ensure

services are available. The Services Plan would be submitted with the LAFCo annexation application for the Project.

The following change was made to pages 3.10-29 of Section 3.12 of the Draft EIR:

- Service Requirements: As stated in this policy procedure, “an annexation shall not be approved merely to facilitate the delivery of one or a few services to the detriment of the delivery of a larger number of services or service more basic to public health and welfare.” The proposed annexation is not requested in order to facilitate the delivery of one or a few services to the detriment of the delivery of a larger number of services, or service more basic to public health and welfare. As stated further in Section 3.12 (Public Services and Recreation) and Section 3.14 (Utilities), the City has adequate service capacity to serve the proposed Project without reducing the adequacy of services elsewhere. See Section 3.12 (Public Services and Recreation) for more information. The annexation will also include detachment from the Lincoln Fire District. Therefore, the proposed annexation is consistent with this policy.

3.11 NOISE

No changes were made to Section 3.11 of the Draft EIR.

3.12 PUBLIC SERVICES AND RECREATION

The following changes were made to pages 3.12-16 and 3.12-17 of Section 3.12 of the Draft EIR:

The Project proposes the development of approximately 306 acres and includes a Development Area of 236.3 acres, Non-development Area of 56.0 acres, and Right-of-Way Annexation Area of 13.7 acres. The Development Area is predominantly comprised of agricultural and undeveloped uses. The Non-development area consists of agricultural land, one (1) existing residential home in the northwestern portion, a commercial use (single building), and a church. The Right-of-Way Annexation Area includes Eight Mile Road, forming the northern border of the Project site. The proposed Project would include the development of approximately 236.3-acres of land which will include: 1,332 to 1,411 residential units, parks, open space, public facilities, and public roadway right-of-way land uses. Using the most recent Department of Finance data (2023) for the average number of persons residing in a dwelling unit in the City of Stockton (3.13 persons per household), the Project could result in 4,169 to 4,416 residents. The proposed Project would not result in direct population growth beyond the City’s capacity identified in the General Plan; rather, it would result in a reduction of the total number of units anticipated under the General Plan by approximately 662 to 741 units. The net population reduction associated with the reduction of units under the proposed Project (compared to the capacity assumed for the Project site under the General Plan) is anticipated to be 2,072 to 2,319 persons.

The following changes were made to page 3.12-20 of Section 3.12 of the Draft EIR:

As identified in Table 3.13-5, the Project would result in a net increase of approximately 697 to 738 school-aged children in the LUSD. As described in Chapter 2.0, Project Description, the Project includes the potential development of a school site. The potential adverse physical environmental impacts associated with the proposed school have been addressed within this EIR. It is noted that

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LUSD will do a separate environmental study to determine the precise impacts of developing and operating this school site, if it decides to construct one in project area. Additionally, the LUSD collects impact fees from new developments under the provisions of SB 50. The Project would be subject to payment of school impact fees in accordance with Senate Bill 50 (SB 50). Pursuant to Government Code Section 65995(3)(h), payment of statutory fees is deemed to be full and complete mitigation of impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use or development of real property..." Developer fees collected by LUSD pursuant to SB 50 are used for the provision of additional and reconstructed or modernized school facilities. The Project Applicant would be required to pay all statutory fees in place at the time and demonstrate proof of payment to the City. With payment of the fees, the impact of the proposed Project on the need for additional school facilities is ***less than significant***.

3.13 TRANSPORTATION AND CIRCULATION

The following changes were made to pages 3.13-18 and 3.13-19 of Section 3.13 of the Draft EIR:

TABLE 3.13-2: VMT ANALYSIS – CITYWIDE TOTAL VMT

SCENARIO	NO PROJECT	WITH PROJECT	PROJECT-RELATED CHANGE	WITH PROJECT VMT GREATER THAN NO PROJECT VMT?
Baseline Year Before Mitigation	5,184,549	5,220,298	<u>35,749</u>	Yes
Baseline Year With Mitigation	--	5,215,729	<u>31,180</u>	Yes
Cumulative Year Before Mitigation	6,597,410	6,636,505	<u>39,095</u>	Yes
Cumulative Year With Mitigation	--	6,632,517	<u>35,107</u>	Yes

SOURCE: WK SHUO CONSULTING, LLC, 2023.

An assessment of potential measures included in the GHG Handbook is presented in detail in Appendix F of this EIR. The assessment includes the feasibility and applicability of GHG Handbook measures for the proposed Project. Measures considered for the Project are those included in the GHG Handbook in the Transportation category. The GHG Handbook presents measures which are considered feasible at a community size level, but are considered not feasible at an individual project size level. These measures, including carshare programs and community-based travel planning, were considered as potential mitigation measures, but are not recommended. The GHG Handbook presents measures which are not applicable to residential land use projects. These are measures which are primarily applicable to employment-generating uses, such as increased job density, ridesharing programs, and subsidized transit programs.

Measures were also considered, but are not feasible because they are not within the authority of the applicant or the City of Stockton. As discussed above, currently, the San Joaquin Regional Transit District (RTD) provides limited public transit service to the Project site. The County Hopper Route 93 operates weekdays along West Lane, with eight northbound trips per day and ten southbound trips per day. County Hopper service is a deviated fixed route type of service. The GHG Handbook presents measures which are related to the structure of the community-level public transit system. While these measures have the potential to reduce VMT, the RTD has authority to implement the measures. Implementation of the measures, including development of a transit-oriented development, increased transit service frequency, provide bus rapid transit, or reduce transit fares, is not within the authority of the applicant or the City of Stockton.

The GHG Handbook presents measures which are considered not applicable to, or not feasible for, the LeBaron Ranch Project site. The GHG Handbook presents measures which are considered not applicable to, or not feasible for, the Project site. These measures were considered as potential mitigation measures, but are not recommended. The Project includes 194 high density multiple-family dwelling units. Current residential development in the vicinity of the Project site is predominantly composed of relatively lower density single family dwelling units. The General Plan travel demand model, used to estimate VMT for the Project, already includes relatively lower VMT per unit generated by the Project multiple family dwelling units. Therefore, the measure to provide increased residential density is already incorporated into the VMT levels presented in Table 3.13-2, and is not considered applicable as a mitigation measure.

The GHG Handbook includes a measure that involves affordable and below market rate housing, noting, "Multifamily residential units must be permanently dedicated as affordable for lower income families." The Project includes a mix of housing types: low-density single family dwelling units, medium-density single family dwelling units, and high-density multiple-family dwelling units. The Project does not include units that are deed restricted as "affordable units". Affordability by design, both for purchase and rent, will be created with some of the product within the medium density and high-density designations.

The GHG Handbook includes three measures that involves parking supply and parking cost, including limiting residential parking supply, unbundling residential parking costs from property cost, and implement market price public parking (on-street). For limiting residential parking supply, the GHG Handbook notes, "This measure is ineffective in locations where unrestricted street parking or other offsite parking is available nearby and has adequate capacity to accommodate project-related vehicle parking demand." Unrestricted street parking is available in the vicinity of the Project site, and is expected to be available in the future. Implementation of unbundling residential parking costs from property cost, would appear to require modification of Stockton Municipal Code section 16.64.040, *Number of parking spaces required*. In the description of implementing market price public parking, the GHG Handbook notes, "This measure will price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers." The Project is composed of residential land use, rather than central business districts, employment centers and retail centers. Therefore, these parking-related mitigation measures are not feasible for the Project.

The GHG Handbook includes a measure related to the density and connectivity of streets. the Project as proposed includes a relatively high density of street intersections within the Project site. The number of connections to surrounding arterial roadways (i.e., Eight Mile Road, West Lane, and Lower Sacramento Road), however, are constrained by existing adopted precise road plans for each of these roadways. As a result, the measure is considered not feasible for the Project.

The following changes were made to pages 3.13-21 through 3.13-23 of Section 3.13 of the Draft EIR:

Based on estimates presented in the GHG Handbook, implementation of the Project Design Features recommended above could result in a maximum reduction in VMT of 4.9 percent. It would be reasonable to expect implementation of the measures to result in a reduction somewhat less than 4.9 percent. As a result, implementation of the recommended Project Design Features would not reduce the Project impact on VMT to a less than significant level.

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Mitigation Measure 3.13-1, which requires travel demand management (TDM) strategies, would be required if the school within the project site is constructed. While the VMT reduction measures described immediately above are oriented towards residential land uses, Mitigation Measure 3.13-1 is oriented towards employment-generating uses. Implementation of Mitigation Measure 3.13-1 is feasible because it is within the applicant's purview to implement and has been found effective in previous academic studies. However, the precise effectiveness of specific TDM strategies can be difficult to accurately measure due to several external factors such as types of tenants, employee responses to strategies, and changes to technology. Additionally, it is noted that with the current planned growth and development in the City of Stockton, the City's jobs-housing ratio is expected to increase in 2040, and city-wide home-based work VMT per worker is projected to increase. TDM strategies alone cannot eliminate VMT increases caused by land use imbalance in the rest of the City and greater San Joaquin County geographic area.

Within the City of Stockton and San Joaquin County, there is no requirement to prepare a TDM plan for residential uses. Additionally, specific vehicle trip reduction targets or monitoring of the effectiveness of the Project-specific TDM Plan are not required by San Joaquin County as of January 2024.

The City of Stockton adopted their Transportation Impact Analysis Guidelines (TIAG) in May 2023 which includes strategies that are intended to reduce vehicular travel to meet the requirements of SB 743. The TIAG includes provisions for TDM strategies to reduce the amount of vehicle traffic generated by new employment development by creating measures, strategies, incentives, and policies to shift employees from driving alone and have these employees be aware of and look into the ability of using other travel modes including carpooling, transit (bus and commuter rail), cycling, and walking. In addition, employees who initially arrive in a vehicle would also be encouraged to use alternative travel modes (walking and bicycling). It is possible that the Project would result in schools employees, should the LUSD develop the proposed school site.

As part of this on-going effort to reduce VMT and associated greenhouse gas emissions in the City and region, a TDM Plan will be developed based on California Air Pollution Control Officers Association (CAPCOA) strategies that evaluate any project against mode split targets and other elements outlined by the City of Stockton. The required TDM plan for the Project will be submitted to the City for review and approval.

To monitor the effectiveness of the TDM Plan, there are several viable options that may be required by the City of Stockton as part of the TIAG, including annual surveys to determine employee travel mode split and travel distance for home-based work trips, and/or the implementation of technology to determine the amount of traffic generated by and home-based work miles traveled by employees.

As part of Mitigation Measure 3:13-1, the proposed Project would be required to monitor and evaluate the effectiveness of the Project's TDM Plan and provide the results to the City of Stockton. Based on the results of the evaluation, modifications to the TDM Plan may be required by the City to improve effectiveness toward achieving the home-based work VMT per worker target identified in the City's TIAG.

Based on the status of the City of Stockton's TIAG, even with the implementation of Mitigation Measure 3.13-1, the impact would remain **significant and unavoidable** when compared to the City of Stockton's VMT goal of reducing average home-based work VMT per worker from 18.56 miles to 15.66 miles.

Other strategies to reduce VMT were considered but were deemed infeasible. Further consideration was given to the feasibility of vehicle travel and parking pricing strategies. However, this would have to be a citywide program, which is not under the control of the applicant. For example, reducing parking standards is a City planning and policy measure and cannot be implemented by an individual Project. Additionally, according to the LeBaron Ranch VMT Assessment (WK Shijo Consulting, LLC, 2023) parking pricing strategies are typically recommended for commercial projects, not residential projects such as the proposed Project.²³ This is, in part, because, when limiting parking supply, a best practice is to do so at sites that are located near high quality alternative modes of travel (such as a rail station, frequent bus line, or in a higher density area with multiple walkable locations nearby).²⁴ However, there would not be sufficient high quality nearby alternative modes of transportation would be available to serve the proposed Project, should parking pricing strategies be implemented.

MITIGATION MEASURE(S)

Mitigation Measure 3.13-1: *The Project applicant shall work with the City of Stockton to implement feasible Transportation Demand Management (TDM) strategies, which would decrease the VMT generated by the Project. Specific potential TDM strategies include, but are not limited to, the following:*

- ~~Provide~~ Coordinate with public transit service agencies, including improving San Joaquin Rapid Transit District (RTD) regarding transit service connecting workers with existing and future residential developments;
- Coordinate with San Joaquin RTD regarding the potential for increasing service on Hopper Route 93;
- ~~Implement a fair value commuting program or other pricing of vehicle travel and parking;~~
- TDM coordinator for large employers, such as the LUSD, should the school site be developed;
- Provide carpool and/or vanpool incentive programs;
- Provide on-site lockers and showers for workers who take alternative transportation, such as those employed by the LUSD, should the school site be developed;
- Promote walking and bicycling for employees who live and/or work in the area through the preparation of an Active Transportation Plan;
- Incentivize the use of alternative travel modes for travel within the project site through shared use of e-bikes and e-scooters;

²³ Refer to Measure T-24: Implement Market Price Public Parking, in CAPCOA's GHG Handbook. Available at: <https://www.caleemod.com/handbook/index.html>

²⁴ Refer to Measure T-15: Limit Residential Parking Supply, in CAPCOA's GHG Handbook. Available at: <https://www.caleemod.com/handbook/index.html>

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- Allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours; and
- Employer coordination to SJCOG's DIBs program for workers.

The TDM Plan shall be submitted to the City for review, and the effectiveness of the TDM Plan shall be evaluated, monitored, and revised, if necessary. The TDM Plan shall include the TDM strategies which will be implemented during the lifetime of the proposed Project and shall outline the anticipated effectiveness of the strategies to achieve the home-based work VMT per worker target identified in the City's TIAG. The effectiveness of the TDM Plan may be monitored through annual surveys to determine employee travel mode split and travel distance for home-based work trips, and/or the implementation of technology to determine the amount of traffic generated by and home-based work miles traveled by employees, which shall be determined in coordination with the City and included as part of the TDM Plan. Monitoring of the effectiveness of the TDM Plan shall be mandatory at least for first three year after implementation of the TDMs to see how well the TDM Plan is performing, and to add new TDMs, if some measures become feasible later.

The following changes were made to page 3.13-24 of Section 3.13 of the Draft EIR:

One intersection and one roadway corridor identified with high numbers of accidents are within the Project site vicinity. The intersection of West Lane and Hammer Lane is listed as a location with a high number of bicycle accidents. The Hammer Lane corridor is listed as a street corridor with a high number of pedestrian accidents. The proposed Project is expected to result in project-related traffic through the intersection and along the street corridor. However, as shown in Table 11 and Table 18 in Appendix F, the Project would not result in a change in LOS at the intersection of West Lane and Hammer Lane. With implementation of the Project, the intersection would continue to operate at LOS D, which is considered acceptable by the City of Stockton. As a result, the Project would not result in a significant change to the vehicle mix or speed of traffic that is not compatible with the design of existing or planned facility design.

The following changes were made to page 3.13-25 of Section 3.13 of the Draft EIR:

The Project would be developed in six (6) phases. A portion of the Central Park would be developed in Phase 1. The sequence of phasing would generally be from the future Marlette Road, to the north, toward Eight Mile Road. During construction, there may be periods of active construction in one (1) or more areas of the Project site, depending on the location of each phase and the individual timelines for Project components. Most of the construction activity would occur on the Project site. Construction management plans are prepared by the construction manager once the Project has entered the construction phase, or by the Project civil engineer. The plans will be reviewed by the City of Stockton. The plans will ensure construction activities do not result in unacceptable effects on safety and traffic operations, and do not adversely affect emergency service providers. Therefore, this impact would be **less than significant**.

3.14 UTILITIES AND SERVICE SYSTEMS

The following changes were made to page 3.14-8 of Section 3.14 of the Draft EIR:

The RWCF provides secondary and tertiary treatment of municipal wastewater from throughout the City. The remainder of the City is served by on-site septic systems, or lie outside the urban service

area. The RWCF processes an average of 33 million gallons per day (mgd) and has capacity to treat 55 million gallons of sewage per day. The treated wastewater is discharged into the San Joaquin River. Additionally, the RWCF sewer treatment plant is undergoing the Modifications Project to modernize the facility, and to accommodate growth initially through 2035 with the ability to expand through 2045 and beyond. The Modification Project includes changing the sewer treatment to an activated sludge process to meet the State's standards and replaces equipment and processes that are 40 to 70 years old. The Modification Project was initiated to increase the reliability of the liquid and solids treatment processes, improve reliability in treating existing and projected flows, reduce energy costs and provide reliable renewable energy alternatives, and reduce nitrate plus nitrite concentrations in the final effluent to comply with the RWCF NPDES permit.²⁵

The following changes were made to page 3.14-10 of Section 3.14 of the Draft EIR:

Mitigation Measure 3.14-1: *Prior to occupancy of any building that would require wastewater treatment services, the Project proponent shall secure from the City of Stockton Municipal Utilities Department with a request for utility service adequate wastewater treatment capacity/allocation.*

The following changes were made to page 3.14-11 of Section 3.14 of the Draft EIR:

New wastewater collection and conveyance infrastructure needed for the proposed Project will require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients, consistent with the City of Stockton Municipal Code Chapter 13.08, Sewer Use. The applicant will refine the wastewater collection/conveyance infrastructure design through the development of improvements plans which undergo a review by the Public Works Department to ensure consistency with the City's engineering standards. This improvement plan process will include full engineering design (i.e. location, depth, slope, etc.) of all conveyance infrastructure as well as a review of new sewer pump stations and new force mains if needed. Ultimately, the sanitary sewer collection system will be an underground collection system installed as per the City of Stockton standards and specifications. Sanitary sewer disposal and treatment will be to the RWCF.

The following changes were made to page 3.14-13 of Section 3.14 of the Draft EIR:

The New Hogan Reservoir has a water storage capacity of 317,000 AF. It receives its water supply primarily from rain runoff fed by the Calaveras River. The United States Army Corps of Engineers operates the dam and determines flood control releases when the New Hogan Project is in flood control mode. SEWD is the Watermaster and determines New Hogan releases for irrigation and municipal use for itself and Calaveras County Water District (CACWD) during non-flood control periods. The total annual supply available for both SEWD and CACWD is approximately 84,100 AFY in normal water years. The contract also provides that any water not used by CACWD can be used by SEWD. At the current level of CACWD use, the SEWD can rely on about 83,000 AFY of supply from the New Hogan Project in normal water years under safe yield operation. However, if CACWD exercises its percentage entitlement (43.5 percent), the available supply from this source would be reduced.

²⁵ City of Stockton, Draft Supplement to City of Stockton Regional Wastewater Control Facility Modifications Project Environmental Impact Report. February 2022.

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The New Melones Reservoir has a water storage capacity of 2.4 million AF and is a part of the Central Valley Project (CVP). It receives water primarily from rain and snowmelt runoff and is fed by the Stanislaus River. Pursuant to a December 1983 contract with USBR, SEWD and Central San Joaquin Water Conservation District (CSJWCD) are entitled to up to 155,000 AF of water annually. SEWD is allocated up to 75,000 AFY. Water allocation amounts are based on the March-September water forecast and the February end of month storage in the New Melones Reservoir each year, to be used for municipal, industrial, or agricultural use. This water is subject to cutbacks based on the USBR's overall CVP operations.

The startup and operation of the DWTP in 2012 has provided the COSMUD with a new and reliable source of surface water under Water Right Permit 21176 for current and future use within its service area. In addition, COSMUD will continue to rely on SEWD supplies for a portion of its water supply portfolio provided under the Second Amended Contract (expires in 2035), particularly as development continues in South Stockton. Second Amended Contract Section 3 Renewal: Continued Service entitles COSMUD continued service delivery under then current or mutually-agreeable terms.

The following changes were made to page 3.14-18 of Section 3.14 of the Draft EIR:

WATER SUPPLY AND DEMAND COMPARISON

Based on the analysis described above, the City's existing and projected potable water supplies are sufficient to meet the City's existing and projected future potable water demands, including those future water demands associated with the Project, to the year 2040 under all hydrologic conditions.

The City's 2008 contract with WID includes a provision for increase in water supply as WID-served agricultural lands in the northern part of the City are annexed to the City for municipal and industrial use. Under this contract, an additional 6,500 AFY of WID supply will become available to COSMUD at a rate of 3.0 AFY per acre annexed. WID supply may potentially increase from 6,500 AFY to 13,000 AFY by 2030.

Concurrent with the preparation of this UWMP, the City prepared a Water Master Plan Update to identify projects that improve the reliability of its existing water supplies. Although these projects do not provide additional water supplies, they enhance reliability of the City's water supplies. The Water Master Plan Update recommended the following projects, which have been included in the City's budget for implementation:

- Groundwater Study: A comprehensive groundwater supply study was recommended to investigate existing facility conditions, capacity, and water quality/regulatory trends. The outcome of the study would identify recommendations for rehabilitation of wells in North Stockton and South Stockton, including identifying appropriate wellhead treatment (at each location or centralized at a reservoir site).
- Groundwater Storage Bank Study: A groundwater storage bank/recharge basins study was recommended to address future supply reliability by expanding/augmenting its conjunctive use portfolio, allowing for the flexibility of banking unused available surface water supply in the groundwater basin for use at a later time.

The following changes were made to page 3.14-28 of Section 3.14 of the Draft EIR:

As shown in Table 3.14-4, projected future water demands presented in the 2020 UWMP used land-use based water demand projections developed for the City's 2021 Water Master Plan Update. Water demand projections were based on the anticipated growth within the COSMUD water service area as defined by Envision Stockton 2040 General Plan; the Project, which is consistent with the 2040 General Plan, is included in these projections. The proposed Project would not result in direct population growth beyond the City's capacity identified in the General Plan; rather, it would result in a reduction of the total number of units anticipated under the General Plan by approximately 662 to 741 units. The net population reduction associated with the reduction of units under the proposed Project (compared to the capacity assumed for the Project site under the General Plan) is anticipated to be 2,072 to 2,319 persons. Projected water demands for 2045 are assumed to be the same as projected water demands in 2040 since the development of future planned developments beyond 2040 is not defined in the Envision Stockton 2040 General Plan.

The following changes were made to pages 3.14-40 and 3.14-41 of Section 3.14 of the Draft EIR:

According to the City of Stockton and San Joaquin County Stormwater Quality Control Criteria Plan (SWQCCP), the Project would be considered both a Priority Project and a PLU Project, as the Project includes a residential subdivision of 10 housing units or more (Priority Project) and contains land uses with at least 10 developed dwelling units per acre (PLU Project). Priority projects are required to prepare and submit a Project Stormwater Quality Control Plan with the initial building permit submittal, that demonstrates the Project incorporates site design measures, landscape features, and engineered treatment facilities (typically bioretention facilities) that will minimize imperviousness, retain or detain stormwater, slow runoff rates, and reduce pollutants in post-development runoff. In particular, the Project Stormwater Quality Control Plan would specify BMPs required to be implemented by the Project and design specifications for selected BMPs. The Project Stormwater Quality Control Plan must be submitted for review and approval by the City of Stockton Department of Municipal Utilities, consistent with the requirements in the City's Municipal Code Chapter 13.20.

The proposed Project includes development of a new storm drainage system to serve the proposed uses as described above. The potential environmental effects resulting from construction of the storm drainage system are analyzed throughout this Draft EIR, and in some cases, there are potentially significant impacts associated with construction of this infrastructure. Where impacts are identified for each environmental topic, mitigation measures are developed to avoid, minimize, or compensate for the impact to the extent practicable. All mitigation measures presented throughout this EIR will be implemented to reduce impacts to the extent practicable. There will not be any significant impacts beyond what is disclosed in the other chapters of this document. In addition to the other mitigation measures presented throughout this document, the following mitigation measure is intended to ensure that the drainage system is designed and constructed to meet the City's performance standards. With the implementation of mitigation measures presented throughout this EIR, and the following mitigation measure, impacts would be **less than significant**.

MITIGATION MEASURE

Mitigation Measure 3.14-2: Prior to the issuance of a building or grading permit, the project applicant shall submit a drainage plan to the City of Stockton for review and approval. The plan shall include an engineered Storm Water Quality Control Criteria Plan (SWQCCP) that demonstrates attainment of pre-project runoff requirements prior to release at the Bear Creek outfall. The plan

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shall describe the volume reduction measures and treatment controls, which may include, but not limited to vegetated swale, infiltration basin, rain garden, or bioretention, consistent with the Federal Clean Water Act, the City's Stormwater Quality Control Criteria Plan, the adopted municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit and the City's corresponding Stormwater Management Plan City of Stockton requirements.

4.0 OTHER CEQA-REQUIRED TOPICS

The following changes were made to pages 4.0-28 and 4.0-29 of Chapter 4.0 of the Draft EIR:

The Development Area is bordered on the north by Eight Mile Road, on the east by West Lane, on the west by agricultural land, a residential home, a church and commercial building along Lower Sacramento Road, and on the south by Marlette Road, a partially paved frontage road. The Development Area is predominantly comprised of agricultural and undeveloped uses; sheds and associated agricultural equipment exist in the center portion of the site. Additionally, two (2) dirt/gravel roadways bisect the Development Area, including one roadway extending north to south from Eight Mile Road to the southern boundary at Marlette Road, and another extending east to west from West Lane connecting to the dirt/gravel roadway in the center of the Development Area. Irrigation canals, operated by the Woodbridge Irrigation District, run along the northern, eastern, and southern borders of the Development Area, separating existing agricultural uses from the respective roadways.

The Project site is adjacent to the City of Stockton's northern city limits, within the City of Stockton SOI (as defined in the Envision Stockton 2040 General Plan), and within the City of Stockton Urban Services Boundary. The Project site is primarily bounded by lands within the County of San Joaquin (County) to the north and south. Lands within the City of Stockton are located to the east and west. North and south of the Project site are existing agricultural lands, to the east of the site are existing are existing agricultural lands that were recently incorporated into the City of Stockton and will be developed with residential and commercial uses as part of the approved Tra Vigne development project. West of the Project site is an existing residential neighborhood. The proposed Project would require a City of Stockton General Plan Amendment to the Land Use Element to change land uses on the Project site. Changes to the General Plan Land Use Map are largely a reorganization of the precise locations for each land use within the boundary of the Project site as opposed to land use changes. The proposed Project would not result in direct population growth beyond the City's capacity identified in the General Plan; rather, it would result in a reduction of the total number of units anticipated under the General Plan by approximately 662 to 741 units. The net population reduction associated with the reduction of units under the proposed Project (compared to the capacity assumed for the Project site under the General Plan) is anticipated to be 2,072 to 2,319 persons. The Project would result in an extension of developed uses within an area of the City that currently has development uses and is planned for urban development by the City's General Plan. The Project would provide roadways and pedestrian pathways to connect the Project site to the existing circulation system and to allow access to and from the site.

Buildout of the Project would require the extension of off-site and on-site roadway, potable water, wastewater, and storm drainage infrastructure to the undeveloped and underdeveloped portions of the Project site. However, as noted in Section 3.15, Utilities, wastewater generated by the proposed Project could be accommodated by the existing wastewater treatment facilities. Additionally, the City has adequate water supply to meet the water demand from buildout of the Project and the

landfill that would serve the Project has adequate capacity to manage the solid waste generated as a result of the Project. Furthermore, buildout of the Project would not generate or contribute runoff water that would exceed the capacity of the stormwater drainage system. The existing development to the west of the Project site includes residential uses. The land to the east and south of the Project site is also designated for residential uses. Growth inducement to the undeveloped agricultural land to the north of the Project site would not occur as that land is designated as Agricultural General (A/G), with land along the Pixley Slough designated Resource Conservation (OS/RC). The proposed Project would not oversize or extend infrastructure to that area, and would not induce growth beyond that anticipated under the City's General Plan.

Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire state, is inevitable. The primary factors that account for population growth are natural increase and net migration. The average annual birth rate for California is expected to be 20 births per 1,000 population. Additionally, California is expected to attract more than one third of the country's immigrants. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. While these factors would likely result in growth in Stockton during the planning period of the General Plan, growth will continue to occur based primarily on the demand of the housing market and demand for new commercial, industrial, and other non-residential uses. Using the most recent Department of Finance data (2023) for the average number of persons residing in a dwelling unit in the City of Stockton (3.13 persons per household), the Project could result in 4,169 to 4,416 residents. Based on the growth projected to occur in the City's General Plan Planning Area, which, as discussed above, the net population reduction associated with the reduction of units under the proposed Project (compared to the capacity assumed for the Project site under the General Plan) is anticipated to be 2,072 to 2,319 persons, the proposed Project would not induce a substantial amount of growth that has not been adequately planned. Overall, cumulative growth would not displace substantial numbers of people or housing or exceed planned levels of growth.

The Project would result in an increase in employment opportunities by creating full-time job positions at the school site. The Project would also generate short-term construction employment opportunities, but these opportunities would not result in substantial population growth in the project region. The increase in population could also induce indirect job inducement. As discussed above, the population growth of the Project is anticipated by the General Plan. The General Plan land use map provides a mixture of housing, shopping, public, and employment opportunities, so that as the number of residents increase, they do not have to pressure adjacent communities to provide new commercial and employment opportunities. Therefore, the proposed Project would not result in significant growth inducing impacts.

5.0 ALTERNATIVES TO THE PROPOSED PROJECT

The following changes were made to page 5.0-12 of Chapter 5.0 of the Draft EIR:

Development of the proposed Project would result in the permanent conversion of 23.12 acres of Prime Farmland, 217.79 acres of Farmland of Statewide Importance, and 7.51 acres of Farmland of Local Importance to non-agricultural use. Because the size of the Development Area and Project site under this alternative would be equal to the Project, the amount of Farmland converted would be equal to the Project. Overall, the Reduced Density Alternative would have ~~equal~~ equal-similar impacts on agricultural resources when compared to the proposed Project.

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The following changes were made to page 5.0-13 of Chapter 5.0 of the Draft EIR:

The size of the Development Area and Project site would be equal to the Project under this alternative. As such, the same amount of habitat conversion would result, and the same mitigation measures would be required for this alternative. As such, the Reduced Density Alternative would result in similar equal impacts to biological resources when compared to the proposed Project.

Cultural and Tribal Resources

As discussed previously, a CHRIS search and a field assessment conducted as part of the Cultural Resource Assessment found no evidence of cultural resources in the Project site. As such, the Project site does not contain historical resources, archeological resources, or tribal cultural resources. Additionally, no human remains have been documented on or near the Project site. Any previously unknown cultural or tribal cultural resources which may be discovered during development of the proposed Project would be required to be preserved, either through preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. With implementation of the mitigation measures provided in Section 3.5, the proposed Project is not anticipated to considerably contribute to a significant reduction in cultural resources in the region.

The size of the Development Area and Project site would be equal to the Project under this alternative. As such, the same amount of land conversion would result. This would result in an equal potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. The same mitigation measures required for the proposed Project would be required for this alternative. Overall, the Reduced Density Alternative would result in an similar equal potential for impacts to cultural resources.

The following changes were made to page 5.0-15 of Chapter 5.0 of the Draft EIR:

Under the Reduced Density Alternative, the type of urban uses would not change when compared to the proposed Project, but the amount of development would be reduced by 25 percent. This alternative would still use the hazardous materials identified under the proposed Project. As such, this alternative would have similar equal impacts from hazards and hazardous materials impacts when compared to the proposed Project.

The following changes were made to page 5.0-17 of Chapter 5.0 of the Draft EIR:

The VMT would likely decrease due to the reduction in units. The other impacts would be similar equal to the Project. Overall, the Reduced Density Alternative would result in slightly reduced traffic related impacts when compared to the proposed Project.

The following changes were made to page 5.0-19 of Chapter 5.0 of the Draft EIR:

Uses in the Agriculture Protection Alternative would be required to adhere to the same mitigation measures as the proposed Project. The Agriculture Protection Alternative would result in similar equal impacts related to air quality when compared to the proposed Project and the significant and unavoidable air quality impact would remain under this alternative.

The following changes were made to page 5.0-20 of Chapter 5.0 of the Draft EIR:

Under the Agriculture Protection Alternative, the amount of developed area would be reduced by 25 percent compared to the Project, but the structural square footage that would be subject to hazardous geological conditions would be ~~similar~~equal to the Project. Both the proposed Project and the Agriculture Protection Alternative would not result in potentially significant impacts related to geology and soils and both would require mitigation. As such, the Agriculture Protection Alternative would result in ~~similar~~equal geology and soils impacts when compared to the proposed Project.

The following changes were made to page 5.0-21 of Chapter 5.0 of the Draft EIR:

Under the Agriculture Protection Alternative, the Project site would be developed with the same number of residential units as the proposed Project, but the amount of developed area would be decreased by 25 percent. All uses in the Agriculture Protection Alternative would be required to adhere to the same mitigation measure as the proposed Project. The ~~similar~~equal amount of development would result in a corresponding ~~similar~~equal level of GHG emissions when compared to the proposed Project. As such, the GHG emissions impact would have ~~similar~~equal impacts when compared to the proposed Project.

Hazards and Hazardous Materials

For the most part, potential impacts associated with new and future development would be confined to commercial and industrial areas and would not involve the use of hazardous substances in large quantities or that would be particularly hazardous. Incidents, if any, would typically be site specific and would involve accidental spills or inadvertent releases. Associated health and safety risks would generally be limited to those individuals using the materials or to persons in the immediate vicinity of the materials and would not combine with similar effects elsewhere (i.e., construction workers), as hazard-related impacts tend to be site-specific and Project-specific.

The Project site is not associated with any existing hazardous materials spills; however, after agricultural operations cease, and development is anticipated to occur, the applicant or future project proponent would be required to hire a qualified consultant to perform site-specific soil sampling to determine if chemicals of potential concern associated with the historical agricultural uses at the Project site are present in shallow soil at concentrations that would pose a threat to human health. Overall, consistency with federal, State, and local laws and regulations related to the handling of hazardous materials discussed above and implementation of Mitigation Measures 3.8-1 through 3.8-3 would reduce potential impacts that could occur due to the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with construction activities within the Project site to a less than significant level.

Under the Agriculture Protection Alternative, the type of urban uses would not change when compared to the proposed Project, but the amount of developed area would be reduced by 25 percent. The reduction in development area would result in a slight reduction in construction related impacts because the amount of potentially contaminated soils that would be disturbed would be reduced compared to the Project. This alternative would use the same types and quantities of hazardous materials identified under the proposed Project. As such, this alternative would have ~~slightly reduced~~equal impacts from hazards and hazardous materials impacts when compared to the proposed Project.

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The following changes were made to pages 5.0-22 and 5.0-23 of Chapter 5.0 of the Draft EIR:

The Agriculture Protection Alternative would result in an equal amount of residential units uses compared to the Project; therefore, the noise impacts associated with vehicular and operational activities of the proposed Project would be equal under this alternative. Although the eastern portion of the Development Area would not be developed under this alternative, there are few noise sensitive receptors near the eastern portion of the site. All noise issues would be mitigated, as appropriate, through noise attenuation and best management practices under both the proposed Project and the Agriculture Protection Alternative. Therefore, under this alternative, noise impacts are similar~~equal~~ when compared to the proposed Project.

Public Services and Recreation

Development of the proposed Project will require payment of all applicable fees and assessments required to fund its fair share of public services. This funding would assist in the development of facilities to meet the City's standards. The proposed Project would have a less than significant impact to fire, police, schools, and recreational facilities.

Under this alternative, the proposed Project would be developed with the same components as described in the Project Description, but the density of the residential areas would be increased to maintain the number of residential units proposed while also reducing the development footprint. Both the proposed Project and the Agriculture Protection Alternative would result in less-than-significant impacts to public services. As such, impacts to public services under this alternative would be similar~~equal~~ to the proposed Project.

Transportation and Circulation

As shown in Table 3.13-1 in Section 3.13, under Baseline Year conditions, the proposed Project would generate 20.10 home-based VMT per resident. This would be 35 percent above the significance threshold. As a result, the Project is considered to have a significant impact on VMT. Under Cumulative Year conditions, the Project would generate 17.54 home-based VMT per resident. This would be 18 percent above the significance threshold. As a result, the Project is considered to have a significant impact on VMT. All other transportation related impacts were determined to be less than significant.

The VMT would be similar the Project. As such, the significant and unavoidable VMT impact would remain under this alternative. The other impacts would be like the Project. Overall, the Reduced Density Alternative would result in similar~~equal~~ traffic related impacts when compared to the proposed Project.

The following changes were made to pages 5.0-24 and 5.0-25 of Chapter 5.0 of the Draft EIR:

This alternative would have similar~~equal~~ wastewater treatment demand, similar~~equal~~ water demand, similar~~equal~~ solid waste generated, and similar~~equal~~ storm water runoff when compared to the proposed Project. As such, this alternative would have similar~~equal~~ impacts when compared to the proposed Project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project (No Build) Alternative is the environmentally superior

alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed Project.

Table 5.0-2 presents a comparison of the alternative Project impacts with those of the proposed Project.

TABLE 5.0-2: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	NO PROJECT (NO BUILD) ALTERNATIVE	REDUCED DENSITY ALTERNATIVE	AGRICULTURE PROTECTION ALTERNATIVE
Aesthetics and Visual Resources	Less (Best)	Slightly Less (3rd Best)	Less (2nd Best)
Agricultural Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Air Quality	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Biological Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Cultural and Tribal Resources	Less (Best)	Equal (3rd Best)	Less (2nd Best)
Geology and Soils	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Greenhouse Gases, Climate Change and Energy	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Hazards and Hazardous Materials	Less (Best)	Equal (2nd-3rd Best)	Equal-Slightly Less (2nd Best)
Hydrology and Water Quality	Less (Best)	Slightly Less (3rd Best)	Less (2nd Best)
Land Use and Population	Less (Best)	Less (2nd Best)	Equal (3rd Best)
Noise	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Public Services and Recreation	Less (Best)	Equal (2nd Best)	Equal (3rd Best)
Transportation and Circulation	Less (Best)	Slightly Less (2nd Best)	Equal (3rd Best)
Utilities	Less (Best)	Less (2nd Best)	Equal (3rd Best)

GREATER = GREATER IMPACT THAN THAT OF THE PROPOSED PROJECT

LESS = LESS IMPACT THAN THAT OF THE PROPOSED PROJECT

EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE PROPOSED PROJECT

As shown in the table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project (No Build) Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. Therefore, the Reduced Density Alternative and Agriculture Protection Alternative both rank higher than the proposed Project. The Reduced Density Alternative would have equal impacts in five (5) areas, slightly less impacts in five (5) areas, and less impacts in nine (9) areas. The Agriculture Protection Alternative would have equal impacts in nine (9) areas, slightly less impacts in one (1) area, and less impacts in five (5) areas. Therefore, the Reduced Density Alternative would be the next environmentally superior alternative. It is noted that neither the Agriculture Protection Alternative nor the Reduced Density Alternative fully meet all the Project objectives. See Section 5.4 below for a comparative evaluation of the objectives for each alternative.

6.0 REPORT PREPARERS

No changes were made to Chapter 6.0 of the Draft EIR.

7.0 REFERENCES

No changes were made to Chapter 7.0 of the Draft EIR.

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This document is the Final Mitigation Monitoring and Reporting Program (FMMRP) for the LeBaron Ranch Project (Project). This FMMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” A FMMRP is required for the proposed Project because the EIR has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

The numbering of the individual mitigation measures follows the numbering sequence as found in the Draft EIR.

4.1 MITIGATION MONITORING AND REPORTING PROGRAM

The FMMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Final EIR.

The City of Stockton will be the primary agency responsible for implementing the mitigation measures and will continue to monitor mitigation measures that are required to be implemented during the operation of the Project.

The FMMRP is presented in tabular form on the following pages. The components of the FMMRP are described briefly below:

- **Mitigation Measures:** The mitigation measures are taken from the Draft EIR in the same order that they appear in that document.
- **Mitigation Timing:** Identifies at which stage of the project mitigation must be completed.
- **Monitoring Responsibility:** Identifies the agency that is responsible for mitigation monitoring.
- **Compliance Verification:** This is a space that is available for the monitor to date and initial when the monitoring or mitigation implementation took place.

TABLE 4.0-1: MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
AGRICULTURAL RESOURCES				
Impact 3.2-1: The proposed Project would result in the conversion of Farmlands, including Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses	<p>Mitigation Measure 3.2-1: Prior to the conversion of Important Farmland on the Project site, the Project applicant shall participate in the City's Agricultural Lands Mitigation Program, under which developers of the property shall contribute agricultural mitigation land or shall pay the Agricultural Land Mitigation Fee to the City on a 1:1 basis for each acre of land converted. The Agricultural Land Mitigation Program provides that agricultural mitigation lands shall be dedicated to a qualifying management entity such as the Central Valley Farmland Trust. The fees shall be collected by the City, held in a dedicated account, and then expended by the City to acquire agricultural mitigation land or pay for the monitoring and administrative costs of the program. The fees may also be transferred to a qualifying entity for the same purpose. Payment in the in the City's Agricultural Lands Mitigation Program would be feasible or effective mitigation for conversion of agricultural land.</p> <p>Alternatively, participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) that results in agricultural land mitigation may also be considered as the functional equivalent of mitigation for the loss of Important Farmland. The SJMSCP requires the payment of a per-acre fee for loss of wildlife habitat, which in San Joaquin County is largely integral with agricultural use. One important use of the fees is the acquisition of conservation easements over agricultural land that are intended to preserve the agricultural use of these lands in order to maintain their biological habitat values.</p>	<p>City of Stockton Community Development Department</p> <p>San Joaquin Council of Governments</p>	Prior to the conversion of Important Farmland on the Project site	
AIR QUALITY				
Impact 3.3-1: Project operation has the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan	<p>Mitigation Measure 3.3-1: The Project applicant(s) shall comply with SJVAPCD Rule 4101, which prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants. Specifically, the project applicant(s), during Project operation, shall not discharge into the atmosphere any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than (3) minutes in any one (1) hour which is: a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; b) Of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of this rule.</p>	City of Stockton Community Development Department	Prior to the issuance of the first building permit	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p>Mitigation Measure 3.3-2: The Project applicant(s) shall comply with SJVAPCD Rule 4601, during Project construction and operation, which limits VOC emissions from architectural coatings. This rule specifies architectural coatings storage, clean up and labeling requirements. Specific VOC limits for architectural coatings are provided within the Air District's website, located at: https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations/</p> <p>Mitigation Measure 3.3-3: The Project applicant(s) shall utilize low-VOC paints, equivalent to 10 g/L of ROG, if commercially available.</p> <p>Mitigation Measure 3.3-4: The City shall educate the Project applicant(s) on the benefits of a VERA. The Project applicant(s) shall consult with the City regarding the results of SJVAPCD's Rule 9510 process, prior the building permit stage. If emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510 are not sufficient to reduce emissions to below the applicable SJVAPCD thresholds of significance for operational ROG, the project applicant shall enter into a VERA with the SJVAPCD, to reduce emissions to below the applicable thresholds of significance, after taking into account any emissions reductions associated with mandatory compliance with SJVAPCD's Rule 9510. If conditions warrant participation in a VERA, the VERA shall demonstrate a reduction in emissions that meets SJVAPCD's ROG operational emissions threshold through a process that funds and implements emissions reduction projects within the SJVAB. The types of emission reduction projects that could be funded include replacing old heavy-duty trucks with cleaner, more efficient heavy-duty trucks, for example. If a VERA is found to be required, the project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level.</p> <p>Mitigation Measure 3.3-5: The Project applicant(s) shall provide information regarding the Air District's Clean Green Yard Machines (CGYM) program, which provides incentive funding for the replacement of existing gas powered lawn and garden equipment, to the home-buyers at time of sale of the housing units by the applicant. More information on the District CGYM program and funding can be found at:</p>	<p>City of Stockton Community Development Department</p> <p>City of Stockton Community Development Department</p> <p>City of Stockton Community Development Department</p> <p>City of Stockton Community Development Department</p>	<p>Prior to the issuance of the first building permit</p> <p>Prior to the issuance of the first building permit</p> <p>Prior to the issuance of the first building permit</p> <p>Prior to operation of the Project</p>	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	https://ww2.valleyair.org/grants/zero-emission-landscaping-equipment-voucher-program/ .			
Impact 3.3-2: Proposed Project construction activities would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan	<p>Mitigation Measure 3.3-6: Prior to the issuance of a Grading Permit for each phase of the Project, the Project Proponent shall prepare and submit a Dust Control Plan that meets all of the applicable requirements of APCD Rule 8021, Section 6.3, for the review and approval of the APCD Air Pollution Control Officer.</p> <p>Mitigation Measure 3.3-7: During all construction activities, the Project Proponent shall implement dust control measures, as required by APCD Rules 8011-8081, to limit Visible Dust Emissions to 20% opacity or less. Dust control measures shall include application of water or chemical dust suppressants to unpaved roads and graded areas, covering or stabilization of transported bulk materials, prevention of carryout or trackout of soil materials to public roads, limiting the area subject to soil disturbance, construction of wind barriers, access restrictions to inactive sites as required by the applicable rules.</p> <p>Mitigation Measure 3.3-8: During all construction activities, the Project proponent shall implement the following dust control practices identified in Tables 6-2 and 6-3 of the GAMAQI (2002).</p> <ol style="list-style-type: none"> All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall control fugitive dust emissions by application of water or by presoaking. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is 	<p>City of Stockton Community Development Department/ APCD Air Pollution Control Officer</p> <p>City of Stockton Community Development Department</p> <p>City of Stockton Community Development Department</p>	<p>Prior to the issuance of a Grading Permit for each phase of the Project</p> <p>During all construction activities</p> <p>During all construction activities</p>	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p><i>expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.</i></p> <p><i>f. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.</i></p> <p><i>g. Limit traffic speeds on unpaved roads to 5 mph.</i></p> <p><i>h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.</i></p> <p>Mitigation Measure 3.3-9: Asphalt paving shall be applied in accordance with APCD Rule 4641, the purpose of which is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations. The Project Applicant shall coordinate with the APCD, prior to Project asphalt paving activities, to ensure all Project asphalt paving would comply with this rule. The Project Applicant shall provide the City of Stockton with evidence of consultation with the APCD, including confirmation of compliance with APCD Rule 4641.</p>	City of Stockton Community Development Department/ APCD	During all construction activities	
BIOLOGICAL RESOURCES				
Impact 3.4-2: The proposed Project has the potential to have direct or indirect effects on special-status reptile and amphibian species	<p>Mitigation Measure 3.4-1: Prior to commencement of any grading activities, the Project proponent shall seek coverage under the San Joaquin County Multi-Species Habitat Conservation Plan (SJMSCP) to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the Migratory Bird Treaty Act (MBTA). Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.</p> <p>Mitigation Measure 3.4-2: Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant</p>	<p>City of Stockton Community Development Department</p> <p>San Joaquin Council of Governments</p> <p>City of Stockton Community</p>	<p>Prior to commencement of any grading activities</p> <p>Prior to the commencement</p>	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p>shall arrange for a qualified biologist to conduct a preconstruction survey for Swainson's hawks. If no hawks or hawk nests are detected, then construction activities may commence. If Swainson's hawks or occupied nests are discovered, then the following shall be implemented:</p> <ul style="list-style-type: none"> During the nesting season (February 15 through August 31) and Swainson's hawks are nesting in or near the Project site, a construction setback of 250 feet of the nest tree (as measured from under the nest) would be required until nesting is complete. <p>This requirement is consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys as required.</p> <p>Mitigation Measure 3.4-3: Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for burrowing owls. If no owls or owl nests are detected, then construction activities may commence. If burrowing owls or occupied nests are discovered, then the following shall be implemented:</p> <ul style="list-style-type: none"> During the nesting season (February 1 and August 31) and burrowing owls are present on-site, a 250-foot construction setback from the natal burrow would be required until nesting is complete. Outside the nesting season (September 1 and January 31) burrowing owls occupying the Project site should be evicted from the Project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995) <p>These requirements are consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required.</p> <p>Mitigation Measure 3.4-4: Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for</p>	<p>Development Department</p> <p>San Joaquin Council of Governments</p> <p>City of Stockton Community Development Department</p> <p>San Joaquin Council of Governments</p> <p>City of Stockton Community Development</p>	<p>of grading activities or other ground disturbing activities on the Project site</p> <p>Prior to the commencement of grading activities or other ground disturbing activities on the Project site</p> <p>Prior to the commencement of grading</p>	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p><i>tricolored blackbird. If no tricolored blackbird or tricolored blackbird nests are detected, then construction activities may commence. If tricolored blackbird or occupied nests are discovered, then the following shall be implemented:</i></p> <ul style="list-style-type: none"> <i>A setback of 500 feet from colonial nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by brightly colored temporary fencing.</i> <p><i>This requirement is consistent with the incidental take and minimization measures (ITMMs) outlined in the SJMSCP. Implementation of this requirement shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys as required.</i></p>	Department San Joaquin Council of Governments	activities or other ground disturbing activities on the Project site	
Impact 3.4-3: The proposed Project has the potential to have direct or indirect effects on special-status bird species	Implement Mitigation Measure 3.4-1.	See Mitigation Measure 3.4-1	See Mitigation Measure 3.4-1	
Impact 3.4-4: The proposed Project has the potential to result in direct or indirect effects on special-status mammal species.	Implement Mitigation Measure 3.4-1.	See Mitigation Measure 3.4-1	See Mitigation Measure 3.4-1	
Impact 3.4-11: The proposed Project has the potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Mitigation Measure 3.4-5: <i>If removal of any oak tree on the project site is required, the project applicant or contractor shall hire a certified arborist to survey the oak trees proposed for removal to determine if they are Heritage Trees as defined in Stockton Municipal Code Chapter 16.130. The survey shall occur prior to site disturbance. The arborist report with its findings shall be submitted to the City's Community Development Department. If Heritage Trees are determined to exist on the property, removal of any such tree shall require a permit to be issued by the City in accordance with Stockton Municipal Code Chapter 16.130. The permittee shall comply with all permit conditions, including tree replacement at specified ratios.</i>	City of Stockton Community Development Department	If removal of any oak tree on the project site is required	
CULTURAL AND TRIBAL RESOURCES				
Impact 3.5-2: Project implementation has the potential	Mitigation Measure 3.5-1: <i>Prior to any ground-disturbing activities on the Project site, the Developer shall retain a qualified archaeologist and native</i>	City of Stockton Community	Prior to any ground	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
<p>to cause a substantial adverse change to a significant archaeological resource, as defined in CEQA Guidelines §15064.5, or a significant tribal cultural resource, as defined in Public Resources Code §21074</p>	<p><i>American monitor to conduct pre-construction worker cultural resources sensitivity training. The training session shall focus on the recognition of the types of historical and cultural, including Native American, resources that could be encountered; procedures to be followed if resources are found, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and pertinent laws protecting these resources. Training shall be scheduled at the discretion of the Project applicant in consultation with the City. The Developer shall be responsible for ensuring that all workers requiring training are in attendance. Those in attendance shall be recorded, with records maintained on-site. Any new workers that were not part of the initial training shall be required to undergo a new training session.</i></p> <p>Mitigation Measure 3.5-2: <i>If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, are found during grading and construction activities during any phase of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).</i></p> <p><i>Work shall not continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.</i></p> <p><i>If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Project applicant's expense.</i></p> <p><i>If the discovery proves to be significant under CEQA and cannot be avoided by the Project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts. Mitigation could include avoidance, preservation in place, or the scientific removal, analysis, reporting, and curation of any recovered cultural materials. Construction shall not resume in the area until appropriate protection and preservation measures are in place and have been approved by the Community</i></p>	<p>Development Department, qualified archaeologist, and Native American monitor</p> <p>City of Stockton Community Development Department, qualified archaeologist</p>	<p>disturbance activities</p> <p>If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, are found during grading and construction activities during any phase of the Project</p>	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<i>Development Director or designee, and the qualified archaeologist states in writing that the proposed construction activities would not significantly damage any archaeological or tribal cultural resources.</i>			
GEOLOGY AND SOILS				
Impact 3.6-5: The proposed Project has the potential to directly or indirectly destroy a unique geological feature or paleontological resource	<p>Mitigation Measure 3.6-1: <i>If any paleontological resources are found during grading and construction activities of the Project, all work shall be halted immediately within a 200-foot radius of the discovery, the City of Stockton Community Development Director shall be notified, and a professional vertebrate paleontologist (as defined by the Society for Vertebrate Paleontology) shall be contacted immediately to evaluate the find. The paleontologist shall have the authority to stop or divert construction, as necessary. Documentation and treatment of the discovery shall occur in accordance with Society of Vertebrate Paleontology standards.</i></p> <p><i>Work shall not continue at the discovery site until the professional vertebrate paleontologist evaluates the find pursuant to the CEQA Guidelines and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including, but not limited to, preserving in place or relocating on the Project site, if feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology.</i></p>	City of Stockton Community Development Department, qualified paleontologist	If any paleontological resources are found during grading and construction activities of the Project	
HAZARDS AND HAZARDOUS MATERIALS				
Impact 3.8-1: Project implementation has the potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	<p>Mitigation Measure 3.8-1: <i>Prior to initiating construction or grading activities, the construction contractor shall be provided with project-specific training regarding the identification and handling of hazardous materials and agency notification procedures. In the event that contaminated soils are encountered during construction, the Project applicant shall prepare and implement a Soils Management Plan (SMP) to provide guidance for the proper handling, onsite management, and disposal of impacted soil that might be encountered during construction activities. The SMP shall establish management practices for handling of contaminated soils and other hazardous materials during construction. The SMP would include, but is not limited to, an outline of how Project construction crews would identify, handle, and dispose of potentially contaminated soil; the qualifications of the appropriately trained professionals that would monitor soil conditions and conduct soil sampling during construction; laboratory testing; anticipated field screening methods and appropriate regulatory limits to be applied to determine proper handling and disposal; and requirements for documenting</i></p>	San Joaquin County Department of Environmental Health	Prior to initiating construction or grading activities	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p><i>and reporting incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to dispose of contaminated materials. In the event that potentially contaminated soils were encountered within the footprint of construction, soils would be tested and stockpiled. The SMP shall be submitted to the San Joaquin County Department of Environmental Health for review and approval. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.</i></p> <p>Mitigation Measure 3.8-2: <i>Prior to initiation of any ground disturbance activities, a soil sampling and analysis workplan shall be submitted to the San Joaquin County Department of Environmental Health for approval. The sampling and analysis plan shall meet the requirements of the Department of Toxic Substances Control Interim Guidance for Sampling Agricultural Properties (2008), and the County Department of Environmental Resources Recommended Soil and Groundwater Sampling for Underground Tank Investigations (2013). Evenly distributed soil samples shall be conducted throughout the Development Area for analysis of pesticides and heavy metals. The samples shall be submitted for laboratory analysis of pesticides and heavy metals per DTSC and EPA protocols. The results of the soil sampling shall be submitted to the City of Stockton for review.</i></p> <p><i>If the sampling results indicate the presence of agrichemicals that exceed commercial screening levels, a removal action workplan shall be prepared in coordination with San Joaquin County Environmental Health Department. The removal action workplan shall include a detailed engineering plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection. A no further action letter shall be issued by San Joaquin County Environmental Health Department upon completion of the removal action. The removal action shall be deemed complete when the confirmation samples exhibit concentrations below the commercial screening levels, which will be established by the agencies.</i></p>	City of Stockton Community Development Department	Prior to initiation of any ground disturbance activities	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
HYDROLOGY AND WATER QUALITY				
Impact 3.9-4: The proposed Project has the potential to, in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation	Mitigation Measure 3.9-1: All residential and non-residential structures within the Project site shall meet the urban level of flood protection, as required by the State of California Central Valley Flood Protection Act of 2008 (Senate Bill 5). Finished floor elevations of proposed residential structures shall be elevated to or above the prescribed 200-year floodplain elevation, or proposed nonresidential structures shall be floodproofed, consistent with the City of Stockton's Criteria for Development in 200-year Floodplains and City of Stockton Municipal Code. Code compliance shall be documented in materials prepared by licensed professionals and submitted to the Community Development Director prior to issuance of grading permits.	City of Stockton Community Development Director	Prior to issuance of grading permits	
NOISE				
Impact 3.11-1: The proposed Project has the potential to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	<p>Mitigation Measure 3.11-1: To reduce potential construction noise impacts during Project construction, the following multi-part mitigation measure shall be implemented for the Project:</p> <ul style="list-style-type: none"> All construction equipment powered by internal combustion engines shall be properly muffled and maintained. Quiet construction equipment, particularly air compressors, shall be selected whenever possible. All stationery noise-generating construction equipment such as generators or air compressors shall be located as far as is practical from existing residences. In addition, the Project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site. Unnecessary idling of internal combustion engines shall be prohibited. The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Project site during all Project construction. Construction shall be limited to 7:00 a.m. to 10:00 p.m. Staging areas on the Project site shall be located in areas that maximize, to the extent feasible, the distance between staging activity and sensitive receptors. <p>These requirements shall be noted on the Project improvement plans as part</p>	City of Stockton Building and Life Safety Division	Prior to the approval of Project improvement plans	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<i>of the submittal for grading or building permit, whichever shall occur first, to the City of Stockton Building and Life Safety Division.</i>			
TRANSPORTATION AND CIRCULATION				
Impact 3.13-1: Project implementation would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	<p>Mitigation Measure 3.13-1: <i>The Project applicant shall work with the City of Stockton to implement feasible Transportation Demand Management (TDM) strategies, which would decrease the VMT generated by the Project. Specific potential TDM strategies include, but are not limited to, the following:</i></p> <ul style="list-style-type: none"> • <i>Coordinate with public transit agencies, including improving San Joaquin Rapid Transit District (RTD) regarding transit service connecting workers with existing and future residential developments;</i> • <i>Coordinate with San Joaquin RTD regarding the potential for increasing service on Hopper Route 93;</i> • <i>TDM coordinator for large employers, such as the LUSD, should the school site be developed;</i> • <i>Provide carpool and/or vanpool incentive programs;</i> • <i>Provide on-site lockers and showers for workers who take alternative transportation, such as those employed by the LUSD, should the school site be developed;</i> • <i>Promote walking and bicycling for employees who live and/or work in the area through the preparation of an Active Transportation Plan;</i> • <i>Incentivize the use of alternative travel modes for travel within the project site through shared use of e-bikes and e-scooters;</i> • <i>Allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours; and</i> • <i>Employer coordination to SJCOG's DIBs program for workers.</i> <p><i>The TDM Plan shall be submitted to the City for review, and the effectiveness of the TDM Plan shall be evaluated, monitored, and revised, if necessary. The TDM Plan shall include the TDM strategies which will be implemented during the lifetime of the proposed Project and shall outline the anticipated effectiveness of the strategies to achieve the home-based work VMT per worker target identified in the City's TIAG. The effectiveness of the TDM Plan may be monitored through annual surveys to determine employee travel mode split and travel distance for home-based work trips, and/or the implementation of technology to determine the amount of traffic generated by and home-based work miles traveled by employees, which shall be</i></p>	<p>City of Stockton Community Development Department</p> <p>San Joaquin RTD</p>	Prior to certificates of occupancy/verification of TDM programs/ongoing annual monitoring	

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<i>determined in coordination with the City and included as part of the TDM Plan. Monitoring of the effectiveness of the TDM Plan shall be mandatory at least for first three year after implementation of the TDMs to see how well the TDM Plan is performing, and to add new TDMs, if some measures become feasible later.</i>			
UTILITIES AND SERVICE SYSTEMS				
Impact 3.14-2: The proposed Project would not result in a determination by the wastewater treatment and/or collection provider which serves or may serve the Project that is does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments	Mitigation Measure 3.14-1: Prior to occupancy of any building that would require wastewater treatment services, the Project proponent shall secure from the City of Stockton Municipal Utilities Department with a request for utility service adequate wastewater treatment capacity/allocation.	City of Stockton Community Development Department	Prior to occupancy of any building that would require wastewater treatment services	
Impact 3.14-6: The proposed Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Mitigation Measure 3.14-2: Prior to the issuance of a building or grading permit, the project applicant shall submit a drainage plan to the City of Stockton for review and approval. The plan shall include an engineered Storm Water Quality Control Criteria Plan (SWQCCP) that demonstrates attainment of pre-project runoff requirements prior to release at the Bear Creek outfall. The plan shall describe the volume reduction measures and treatment controls, which may include, but not limited to vegetated swale, infiltration basin, rain garden, or bioretention, consistent with the Federal Clean Water Act, the City's Stormwater Quality Control Criteria Plan, the adopted municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit and the City's corresponding Stormwater Management Plan.	City of Stockton Community Development Department	Prior to the issuance of a building or grading permit	

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APPENDIX B

Air Quality, Greenhouse Gas, and Energy Appendices

City of Stockton - Lebaron Ranch v3 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	City of Stockton - Lebaron Ranch v3
Construction Start Date	1/1/2025
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	0.40
Location	38.05434444439149, -121.30877263887623
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2149
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Single Family Housing	1,217	Dwelling Unit	192	2,373,150	14,254,547	0.00	3,931	Low Density Residential
Apartments Low Rise	194	Dwelling Unit	9.50	205,640	0.00	0.00	627	High Density Residential
City Park	30.7	Acre	30.7	0.00	0.00	0.00	—	Park and Open Space Areas
Other Asphalt Surfaces	4.50	Acre	4.50	0.00	0.00	0.00	—	Storm Basin

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.40	166	29.7	46.7	0.06	1.23	9.37	10.6	1.14	3.69	4.83	—	12,817	12,817	0.43	0.88	31.6	13,114
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.02	166	31.7	40.2	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	12,228	12,228	0.34	0.90	0.82	12,504
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	2.84	46.4	17.0	26.6	0.04	0.62	7.11	7.73	0.57	2.83	3.40	—	8,172	8,172	0.21	0.61	8.72	8,367
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52	8.46	3.09	4.86	0.01	0.11	1.30	1.41	0.10	0.52	0.62	—	1,353	1,353	0.03	0.10	1.44	1,385

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.19	3.68	29.7	45.0	0.06	1.23	9.37	10.6	1.14	3.69	4.83	—	12,013	12,013	0.43	0.85	31.6	12,310
2026	3.96	3.47	16.4	42.5	0.05	0.44	6.01	6.44	0.41	1.46	1.86	—	11,824	11,824	0.28	0.84	28.3	12,109
2027	4.40	166	16.6	46.7	0.06	0.42	6.98	7.39	0.39	1.68	2.07	—	12,817	12,817	0.29	0.88	28.4	13,114
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.01	3.47	31.7	38.8	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	11,502	11,502	0.32	0.85	0.82	11,765
2026	3.81	3.30	17.1	36.8	0.05	0.44	6.01	6.44	0.41	1.46	1.86	—	11,324	11,324	0.31	0.85	0.73	11,587
2027	4.02	166	17.4	40.2	0.06	0.42	6.98	7.39	0.39	1.68	2.07	—	12,228	12,228	0.34	0.90	0.74	12,504
2028	0.87	0.85	6.67	10.4	0.01	0.26	0.13	0.38	0.24	0.03	0.26	—	1,630	1,630	0.06	0.02	0.01	1,636
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.84	2.44	17.0	25.1	0.04	0.62	7.11	7.73	0.57	2.83	3.40	—	6,488	6,488	0.20	0.35	5.35	6,602
2026	2.71	2.36	12.0	26.6	0.04	0.31	4.29	4.60	0.29	1.04	1.33	—	8,172	8,172	0.21	0.61	8.72	8,367
2027	2.20	46.4	10.2	22.6	0.03	0.27	3.55	3.83	0.25	0.86	1.11	—	6,712	6,712	0.17	0.48	6.33	6,865
2028	0.09	0.09	0.69	1.08	< 0.005	0.03	0.01	0.04	0.02	< 0.005	0.03	—	169	169	0.01	< 0.005	0.02	170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.52	0.44	3.09	4.57	0.01	0.11	1.30	1.41	0.10	0.52	0.62	—	1,074	1,074	0.03	0.06	0.89	1,093

2026	0.50	0.43	2.19	4.86	0.01	0.06	0.78	0.84	0.05	0.19	0.24	—	1,353	1,353	0.03	0.10	1.44	1,385
2027	0.40	8.46	1.85	4.12	0.01	0.05	0.65	0.70	0.05	0.16	0.20	—	1,111	1,111	0.03	0.08	1.05	1,137
2028	0.02	0.02	0.13	0.20	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.01	—	28.0	28.0	< 0.005	< 0.005	< 0.005	28.2

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.19	3.68	29.7	45.0	0.06	1.23	9.37	10.6	1.14	3.69	4.83	—	12,013	12,013	0.43	0.85	31.6	12,310
2026	3.96	3.47	16.4	42.5	0.05	0.44	6.01	6.44	0.41	1.46	1.86	—	11,824	11,824	0.28	0.84	28.3	12,109
2027	4.40	166	16.6	46.7	0.06	0.42	6.98	7.39	0.39	1.68	2.07	—	12,817	12,817	0.29	0.88	28.4	13,114
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.01	3.47	31.7	38.8	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	11,502	11,502	0.32	0.85	0.82	11,765
2026	3.81	3.30	17.1	36.8	0.05	0.44	6.01	6.44	0.41	1.46	1.86	—	11,324	11,324	0.31	0.85	0.73	11,587
2027	4.02	166	17.4	40.2	0.06	0.42	6.98	7.39	0.39	1.68	2.07	—	12,228	12,228	0.34	0.90	0.74	12,504
2028	0.87	0.85	6.67	10.4	0.01	0.26	0.13	0.38	0.24	0.03	0.26	—	1,630	1,630	0.06	0.02	0.01	1,636
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.84	2.44	17.0	25.1	0.04	0.62	7.11	7.73	0.57	2.83	3.40	—	6,488	6,488	0.20	0.35	5.35	6,602
2026	2.71	2.36	12.0	26.6	0.04	0.31	4.29	4.60	0.29	1.04	1.33	—	8,172	8,172	0.21	0.61	8.72	8,367
2027	2.20	46.4	10.2	22.6	0.03	0.27	3.55	3.83	0.25	0.86	1.11	—	6,712	6,712	0.17	0.48	6.33	6,865
2028	0.09	0.09	0.69	1.08	< 0.005	0.03	0.01	0.04	0.02	< 0.005	0.03	—	169	169	0.01	< 0.005	0.02	170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.52	0.44	3.09	4.57	0.01	0.11	1.30	1.41	0.10	0.52	0.62	—	1,074	1,074	0.03	0.06	0.89	1,093
2026	0.50	0.43	2.19	4.86	0.01	0.06	0.78	0.84	0.05	0.19	0.24	—	1,353	1,353	0.03	0.10	1.44	1,385

2027	0.40	8.46	1.85	4.12	0.01	0.05	0.65	0.70	0.05	0.16	0.20	—	1,111	1,111	0.03	0.08	1.05	1,137
2028	0.02	0.02	0.13	0.20	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.01	—	28.0	28.0	< 0.005	< 0.005	< 0.005	28.2

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	57.4	85.3	46.1	420	0.86	1.45	69.0	70.5	1.40	17.6	19.0	—	100,457	100,457	5.44	3.85	252	101,992
Mit.	50.1	74.8	45.3	340	0.86	1.41	69.0	70.4	1.37	17.6	18.9	—	100,264	100,264	5.44	3.85	252	101,799
% Reduced	13%	12%	2%	19%	< 0.5%	3%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	46.5	74.6	50.8	304	0.80	1.41	69.0	70.4	1.37	17.6	18.9	—	94,437	94,437	5.91	4.15	24.5	95,847
Mit.	46.5	71.1	50.8	304	0.80	1.41	69.0	70.4	1.37	17.6	18.9	—	94,437	94,437	5.91	4.15	24.5	95,847
% Reduced	—	5%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	50.2	78.2	48.8	340	0.82	1.43	69.0	70.4	1.39	17.5	18.9	—	95,899	95,899	5.68	4.01	119	97,356
Mit.	46.6	71.2	48.4	301	0.82	1.41	69.0	70.4	1.37	17.5	18.9	—	95,805	95,805	5.68	4.01	119	97,261
% Reduced	7%	9%	1%	12%	< 0.5%	1%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.16	14.3	8.90	62.1	0.15	0.26	12.6	12.9	0.25	3.20	3.46	—	15,877	15,877	0.94	0.66	19.7	16,118
Mit.	8.50	13.0	8.84	54.9	0.15	0.26	12.6	12.8	0.25	3.20	3.45	—	15,862	15,862	0.94	0.66	19.7	16,103

% Reduced	7%	9%	1%	12%	< 0.5%	1%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
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2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48.9	45.7	35.6	335	0.80	0.63	69.0	69.6	0.59	17.6	18.1	—	81,329	81,329	3.27	3.69	233	82,745
Area	7.37	39.0	0.76	80.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	214	214	0.01	< 0.005	—	215
Energy	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	18,571	18,571	2.10	0.15	—	18,668
Water	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Total	57.4	85.3	46.1	420	0.86	1.45	69.0	70.5	1.40	17.6	19.0	—	100,457	100,457	5.44	3.85	252	101,992
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	45.4	42.0	41.1	300	0.74	0.63	69.0	69.6	0.59	17.6	18.1	—	75,524	75,524	3.75	4.00	6.05	76,815
Area	—	32.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	18,571	18,571	2.10	0.15	—	18,668
Water	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Total	46.5	74.6	50.8	304	0.80	1.41	69.0	70.4	1.37	17.6	18.9	—	94,437	94,437	5.91	4.15	24.5	95,847
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	45.4	42.1	38.7	296	0.75	0.63	69.0	69.6	0.59	17.5	18.1	—	76,880	76,880	3.52	3.86	101	78,218

Area	3.63	35.5	0.37	39.5	< 0.005	0.02	—	0.02	0.01	—	0.01	—	106	106	< 0.005	< 0.005	—	106
Energy	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	18,571	18,571	2.10	0.15	—	18,668
Water	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Total	50.2	78.2	48.8	340	0.82	1.43	69.0	70.4	1.39	17.5	18.9	—	95,899	95,899	5.68	4.01	119	97,356
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.29	7.69	7.07	54.1	0.14	0.11	12.6	12.7	0.11	3.20	3.31	—	12,728	12,728	0.58	0.64	16.7	12,950
Area	0.66	6.48	0.07	7.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.5	17.5	< 0.005	< 0.005	—	17.5
Energy	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	3,075	3,075	0.35	0.02	—	3,091
Water	—	—	—	—	—	—	—	—	—	—	—	—	56.7	56.7	0.01	< 0.005	—	57.3
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.06	3.06
Total	9.16	14.3	8.90	62.1	0.15	0.26	12.6	12.9	0.25	3.20	3.46	—	15,877	15,877	0.94	0.66	19.7	16,118

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48.9	45.7	35.6	335	0.80	0.63	69.0	69.6	0.59	17.6	18.1	—	81,329	81,329	3.27	3.69	233	82,745
Area	—	28.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	18,593	18,593	2.11	0.15	—	18,689
Water	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Total	50.1	74.8	45.3	340	0.86	1.41	69.0	70.4	1.37	17.6	18.9	—	100,264	100,264	5.44	3.85	252	101,799

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	45.4	42.0	41.1	300	0.74	0.63	69.0	69.6	0.59	17.6	18.1	—	75,524	75,524	3.75	4.00	6.05	76,815
Area	—	28.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	18,571	18,571	2.10	0.15	—	18,668
Water	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Total	46.5	71.1	50.8	304	0.80	1.41	69.0	70.4	1.37	17.6	18.9	—	94,437	94,437	5.91	4.15	24.5	95,847
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	45.4	42.1	38.7	296	0.75	0.63	69.0	69.6	0.59	17.5	18.1	—	76,880	76,880	3.52	3.86	101	78,218
Area	—	28.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	18,582	18,582	2.11	0.15	—	18,678
Water	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Total	46.6	71.2	48.4	301	0.82	1.41	69.0	70.4	1.37	17.5	18.9	—	95,805	95,805	5.68	4.01	119	97,261
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.29	7.69	7.07	54.1	0.14	0.11	12.6	12.7	0.11	3.20	3.31	—	12,728	12,728	0.58	0.64	16.7	12,950
Area	—	5.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	3,076	3,076	0.35	0.02	—	3,092
Water	—	—	—	—	—	—	—	—	—	—	—	—	56.7	56.7	0.01	< 0.005	—	57.3
Waste	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.06	3.06
Total	8.50	13.0	8.84	54.9	0.15	0.26	12.6	12.8	0.25	3.20	3.45	—	15,862	15,862	0.94	0.66	19.7	16,103

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	5.20	4.96	0.01	0.22	—	0.22	0.21	—	0.21	—	870	870	0.04	0.01	—	873
Dust From Material Movement	—	—	—	—	—	—	3.23	3.23	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.95	0.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	144	144	0.01	< 0.005	—	145

Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	146	146	< 0.005	0.01	0.02	148
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.6	24.6	< 0.005	< 0.005	0.04	25.0
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.08	4.08	< 0.005	< 0.005	0.01	4.14
Vendor	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	0.00
Hauling	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	0.00

3.2. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	5.20	4.96	0.01	0.22	—	0.22	0.21	—	0.21	—	870	870	0.04	0.01	—	873
Dust From Material Movement	—	—	—	—	—	—	3.23	3.23	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.95	0.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	144	144	0.01	< 0.005	—	145
Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	146	146	< 0.005	0.01	0.02	148
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.6	24.6	< 0.005	< 0.005	0.04	25.0
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.08	4.08	< 0.005	< 0.005	0.01	4.14
Vendor	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	0.00
Hauling	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	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622

Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.88	4.65	0.01	0.20	—	0.20	0.19	—	0.19	—	1,085	1,085	0.04	0.01	—	1,088
Dust From Material Movement:	—	—	—	—	—	—	1.51	1.51	—	0.60	0.60	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.89	0.85	< 0.005	0.04	—	0.04	0.03	—	0.03	—	180	180	0.01	< 0.005	—	180
Dust From Material Movement:	—	—	—	—	—	—	0.28	0.28	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.04	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	185	185	0.01	0.01	0.69	188
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.02	169
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.2	28.2	< 0.005	< 0.005	0.05	28.6
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.66	4.66	< 0.005	< 0.005	0.01	4.73
Vendor	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	0.00
Hauling	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	0.00

3.4. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.88	4.65	0.01	0.20	—	0.20	0.19	—	0.19	—	1,085	1,085	0.04	0.01	—	1,088
Dust From Material Movement	—	—	—	—	—	—	1.51	1.51	—	0.60	0.60	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.89	0.85	< 0.005	0.04	—	0.04	0.03	—	0.03	—	180	180	0.01	< 0.005	—	180
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.11	0.11	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.04	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	185	185	0.01	0.01	0.69	188
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.02	169
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.2	28.2	< 0.005	< 0.005	0.05	28.6
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.66	4.66	< 0.005	< 0.005	0.01	4.73
Vendor	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	0.00
Hauling	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	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.03	5.03	0.01	0.17	—	0.17	0.15	—	0.15	—	924	924	0.04	0.01	—	928
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.73	0.92	< 0.005	0.03	—	0.03	0.03	—	0.03	—	153	153	0.01	< 0.005	—	154
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.42	1.63	30.1	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	5,345	5,345	0.25	0.20	19.9	5,432
Vendor	0.23	0.14	5.31	1.81	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,270	4,270	0.08	0.63	11.7	4,473
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.44	2.21	2.18	23.9	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	4,830	4,830	0.14	0.20	0.52	4,894
Vendor	0.21	0.13	5.66	1.84	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,274	4,274	0.08	0.63	0.30	4,465
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.86	0.70	9.44	0.00	0.00	1.87	1.87	0.00	0.44	0.44	—	1,909	1,909	0.05	0.08	3.31	1,936
Vendor	0.09	0.05	2.13	0.71	0.01	0.02	0.44	0.47	0.02	0.12	0.15	—	1,647	1,647	0.03	0.24	1.95	1,722
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.13	1.72	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	316	316	0.01	0.01	0.55	321
Vendor	0.02	0.01	0.39	0.13	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	273	273	0.01	0.04	0.32	285
Hauling	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	0.00

3.6. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.03	5.03	0.01	0.17	—	0.17	0.15	—	0.15	—	924	924	0.04	0.01	—	928
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.73	0.92	< 0.005	0.03	—	0.03	0.03	—	0.03	—	153	153	0.01	< 0.005	—	154
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.42	1.63	30.1	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	5,345	5,345	0.25	0.20	19.9	5,432
Vendor	0.23	0.14	5.31	1.81	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,270	4,270	0.08	0.63	11.7	4,473
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.44	2.21	2.18	23.9	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	4,830	4,830	0.14	0.20	0.52	4,894
Vendor	0.21	0.13	5.66	1.84	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,274	4,274	0.08	0.63	0.30	4,465
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.86	0.70	9.44	0.00	0.00	1.87	1.87	0.00	0.44	0.44	—	1,909	1,909	0.05	0.08	3.31	1,936
Vendor	0.09	0.05	2.13	0.71	0.01	0.02	0.44	0.47	0.02	0.12	0.15	—	1,647	1,647	0.03	0.24	1.95	1,722

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.13	1.72	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	316	316	0.01	0.01	0.55	321
Vendor	0.02	0.01	0.39	0.13	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	273	273	0.01	0.04	0.32	285
Hauling	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	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.45	2.26	1.46	27.8	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	5,233	5,233	0.10	0.19	18.0	5,310
Vendor	0.22	0.13	5.08	1.71	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,193	4,193	0.08	0.63	10.3	4,394
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.31	2.10	1.83	22.0	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	4,730	4,730	0.13	0.20	0.47	4,794
Vendor	0.21	0.13	5.41	1.77	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,197	4,197	0.08	0.63	0.27	4,388
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.64	1.50	1.17	16.1	0.00	0.00	3.47	3.47	0.00	0.81	0.81	—	3,463	3,463	0.08	0.14	5.54	3,514
Vendor	0.16	0.10	3.78	1.24	0.02	0.04	0.82	0.87	0.04	0.23	0.27	—	2,996	2,996	0.06	0.45	3.18	3,135
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.21	2.94	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	573	573	0.01	0.02	0.92	582
Vendor	0.03	0.02	0.69	0.23	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	496	496	0.01	0.07	0.53	519
Hauling	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	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.45	2.26	1.46	27.8	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	5,233	5,233	0.10	0.19	18.0	5,310
Vendor	0.22	0.13	5.08	1.71	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,193	4,193	0.08	0.63	10.3	4,394
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.31	2.10	1.83	22.0	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	4,730	4,730	0.13	0.20	0.47	4,794
Vendor	0.21	0.13	5.41	1.77	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,197	4,197	0.08	0.63	0.27	4,388
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.64	1.50	1.17	16.1	0.00	0.00	3.47	3.47	0.00	0.81	0.81	—	3,463	3,463	0.08	0.14	5.54	3,514
Vendor	0.16	0.10	3.78	1.24	0.02	0.04	0.82	0.87	0.04	0.23	0.27	—	2,996	2,996	0.06	0.45	3.18	3,135
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.21	2.94	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	573	573	0.01	0.02	0.92	582
Vendor	0.03	0.02	0.69	0.23	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	496	496	0.01	0.07	0.53	519
Hauling	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	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.11	7.04	0.01	0.18	—	0.18	0.17	—	0.17	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.93	1.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	216	216	0.01	< 0.005	—	217
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.34	2.15	1.28	25.9	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	5,150	5,150	0.09	0.19	16.2	5,225
Vendor	0.22	0.13	4.85	1.64	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,106	4,106	0.08	0.63	9.04	4,305
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.04	1.98	1.66	20.4	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	4,657	4,657	0.13	0.20	0.42	4,720
Vendor	0.21	0.13	5.18	1.70	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,109	4,109	0.08	0.63	0.23	4,300
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.08	0.80	11.4	0.00	0.00	2.64	2.64	0.00	0.62	0.62	—	2,597	2,597	0.06	0.11	3.79	2,635
Vendor	0.12	0.07	2.76	0.90	0.02	0.03	0.63	0.66	0.03	0.17	0.21	—	2,234	2,234	0.04	0.34	2.12	2,340

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.20	0.15	2.08	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	430	430	0.01	0.02	0.63	436
Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	370	370	0.01	0.06	0.35	387
Hauling	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	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.11	7.04	0.01	0.18	—	0.18	0.17	—	0.17	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	0.10	0.93	1.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	216	216	0.01	< 0.005	—	217
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.34	2.15	1.28	25.9	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	5,150	5,150	0.09	0.19	16.2	5,225
Vendor	0.22	0.13	4.85	1.64	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,106	4,106	0.08	0.63	9.04	4,305
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.04	1.98	1.66	20.4	0.00	0.00	4.85	4.85	0.00	1.14	1.14	—	4,657	4,657	0.13	0.20	0.42	4,720
Vendor	0.21	0.13	5.18	1.70	0.03	0.06	1.15	1.21	0.06	0.32	0.38	—	4,109	4,109	0.08	0.63	0.23	4,300
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.08	0.80	11.4	0.00	0.00	2.64	2.64	0.00	0.62	0.62	—	2,597	2,597	0.06	0.11	3.79	2,635
Vendor	0.12	0.07	2.76	0.90	0.02	0.03	0.63	0.66	0.03	0.17	0.21	—	2,234	2,234	0.04	0.34	2.12	2,340
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.20	0.15	2.08	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	430	430	0.01	0.02	0.63	436
Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	370	370	0.01	0.06	0.35	387
Hauling	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	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.18	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	257	257	0.01	< 0.005	—	258
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.6	42.6	< 0.005	< 0.005	—	42.7
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.53	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	123

Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.1	21.1	< 0.005	< 0.005	0.03	21.4
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	0.01	3.54
Vendor	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	0.00
Hauling	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	0.00

3.12. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.13	1.18	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	257	257	0.01	< 0.005	—	258
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.6	42.6	< 0.005	< 0.005	—	42.7
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.53	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	123
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.1	21.1	< 0.005	< 0.005	0.03	21.4
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	0.01	3.54
Vendor	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	0.00
Hauling	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	0.00

3.13. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.69	1.03	< 0.005	0.03	—	0.03	0.02	—	0.02	—	157	157	0.01	< 0.005	—	157
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	26.0
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	119	119	< 0.005	0.01	0.01	120
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	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	0.00
Hauling	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	0.00

3.14. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.69	1.03	< 0.005	0.03	—	0.03	0.02	—	0.02	—	157	157	0.01	< 0.005	—	157
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	26.0
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	119	119	< 0.005	0.01	0.01	120
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.12

Vendor	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	0.00
Hauling	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	0.00

3.15. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	162	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	162	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.23	0.31	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	36.6	36.6	< 0.005	< 0.005	—	36.7

Architectural Coatings	—	44.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.06	6.06	< 0.005	< 0.005	—	6.08
Architectural Coatings	—	8.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.43	0.26	5.17	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	1,030	1,030	0.02	0.04	3.23	1,045
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.40	0.33	4.07	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	931	931	0.03	0.04	0.08	944
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.15	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	262	262	0.01	0.01	0.38	265
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.06	43.9
Vendor	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	0.00
Hauling	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	0.00

3.16. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	162	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	162	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.23	0.31	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	36.6	36.6	< 0.005	< 0.005	—	36.7

Architect Coatings	—	44.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.06	6.06	< 0.005	< 0.005	—	6.08
Architect ural Coatings	—	8.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.43	0.26	5.17	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	1,030	1,030	0.02	0.04	3.23	1,045
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.40	0.33	4.07	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	931	931	0.03	0.04	0.08	944
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.15	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	262	262	0.01	0.01	0.38	265
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.06	43.9

Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	5,799	5,799	0.94	0.11	—	5,856
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	482	482	0.08	0.01	—	487
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,280	6,280	1.02	0.12	—	6,343

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	5,799	5,799	0.94	0.11	—	5,856
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	482	482	0.08	0.01	—	487
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,280	6,280	1.02	0.12	—	6,343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	960	960	0.16	0.02	—	970
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	79.8	79.8	0.01	< 0.005	—	80.6
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,040	1,040	0.17	0.02	—	1,050

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	5,817	5,817	0.94	0.11	—	5,875
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	485	485	0.08	0.01	—	490
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,302	6,302	1.02	0.12	—	6,364
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	5,799	5,799	0.94	0.11	—	5,856
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	482	482	0.08	0.01	—	487
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,280	6,280	1.02	0.12	—	6,343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	962	962	0.16	0.02	—	971
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	80.0	80.0	0.01	< 0.005	—	80.8
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,042	1,042	0.17	0.02	—	1,052

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.05	0.52	8.94	3.80	0.06	0.72	—	0.72	0.72	—	0.72	—	11,346	11,346	1.00	0.02	—	11,377
Apartments Low Rise	0.09	0.04	0.74	0.32	< 0.005	0.06	—	0.06	0.06	—	0.06	—	945	945	0.08	< 0.005	—	948
City Park	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
Other Asphalt Surfaces	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
Total	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	12,291	12,291	1.09	0.02	—	12,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.05	0.52	8.94	3.80	0.06	0.72	—	0.72	0.72	—	0.72	—	11,346	11,346	1.00	0.02	—	11,377
Apartments Low Rise	0.09	0.04	0.74	0.32	< 0.005	0.06	—	0.06	0.06	—	0.06	—	945	945	0.08	< 0.005	—	948
City Park	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

Other Asphalt Surfaces	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
Total	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	12,291	12,291	1.09	0.02	—	12,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.19	0.10	1.63	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	1,878	1,878	0.17	< 0.005	—	1,884
Apartments Low Rise	0.02	0.01	0.14	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
City Park	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
Other Asphalt Surfaces	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
Total	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,035	2,035	0.18	< 0.005	—	2,041

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.05	0.52	8.94	3.80	0.06	0.72	—	0.72	0.72	—	0.72	—	11,346	11,346	1.00	0.02	—	11,377
Apartments Low Rise	0.09	0.04	0.74	0.32	< 0.005	0.06	—	0.06	0.06	—	0.06	—	945	945	0.08	< 0.005	—	948
City Park	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
Other Asphalt Surfaces	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

Total	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	12,291	12,291	1.09	0.02	—	12,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.05	0.52	8.94	3.80	0.06	0.72	—	0.72	0.72	—	0.72	—	11,346	11,346	1.00	0.02	—	11,377
Apartments Low Rise	0.09	0.04	0.74	0.32	< 0.005	0.06	—	0.06	0.06	—	0.06	—	945	945	0.08	< 0.005	—	948
City Park	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
Other Asphalt Surfaces	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
Total	1.13	0.57	9.68	4.12	0.06	0.78	—	0.78	0.78	—	0.78	—	12,291	12,291	1.09	0.02	—	12,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.19	0.10	1.63	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	1,878	1,878	0.17	< 0.005	—	1,884
Apartments Low Rise	0.02	0.01	0.14	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
City Park	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
Other Asphalt Surfaces	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
Total	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,035	2,035	0.18	< 0.005	—	2,041

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
--------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	27.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	4.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.37	6.98	0.76	80.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	214	214	0.01	< 0.005	—	215
Total	7.37	39.0	0.76	80.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	214	214	0.01	< 0.005	—	215
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	27.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	4.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	32.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	5.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.66	0.63	0.07	7.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.5	17.5	< 0.005	< 0.005	—	17.5
Total	0.66	6.48	0.07	7.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.5	17.5	< 0.005	< 0.005	—	17.5

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	27.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	28.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	27.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	28.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	5.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	5.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	328	328	0.05	0.01	—	331
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	328	328	0.05	0.01	—	331
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	54.3	54.3	0.01	< 0.005	—	54.9
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	2.38	2.38	< 0.005	< 0.005	—	2.40
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	56.7	56.7	0.01	< 0.005	—	57.3

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	328	328	0.05	0.01	—	331
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	328	328	0.05	0.01	—	331
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	342	342	0.06	0.01	—	346
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	54.3	54.3	0.01	< 0.005	—	54.9
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	2.38	2.38	< 0.005	< 0.005	—	2.40
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	56.7	56.7	0.01	< 0.005	—	57.3

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47	1.47
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47	1.47
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.06	3.06

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47	1.47
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47	1.47
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.5	18.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.06	3.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	3/25/2025	5.00	60.0	—
Grading	Grading	3/26/2025	6/17/2025	5.00	60.0	—
Building Construction	Building Construction	6/18/2025	10/5/2027	5.00	600	—
Paving	Paving	10/6/2027	2/22/2028	5.00	100	—
Architectural Coating	Architectural Coating	5/19/2027	10/5/2027	5.00	100	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	578	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	151	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	116	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	578	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	151	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	116	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	5,222,050	1,740,683	0.00	0.00	11,761

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	90.0	0.00	—
Grading	0.00	0.00	180	0.00	—
Paving	0.00	0.00	0.00	0.00	17.9

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	13.4	0%
Apartments Low Rise	—	0%
City Park	0.00	0%
Other Asphalt Surfaces	4.50	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	12,784	12,784	12,784	4,666,160	96,884	96,884	96,884	35,362,835

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	12,784	12,784	12,784	4,666,160	96,884	96,884	96,884	35,362,835

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
5222049.75	1,740,683	0.00	0.00	11,761

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	180
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5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	10,375,788	204	0.0330	0.0040	35,402,561
Apartments Low Rise	862,305	204	0.0330	0.0040	2,948,632
City Park	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	10,375,788	204	0.0330	0.0040	35,402,561
Apartments Low Rise	862,305	204	0.0330	0.0040	2,948,632
City Park	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	49,499,984	244,539,302
Apartments Low Rise	7,890,712	0.00
City Park	0.00	0.00

Other Asphalt Surfaces	0.00	0.00
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5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	49,499,984	244,539,302
Apartments Low Rise	7,890,712	0.00
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	1,076	—
Apartments Low Rise	144	—
City Park	2.64	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	1,076	—
Apartments Low Rise	144	—
City Park	2.64	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
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5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24.1	annual days of extreme heat
Extreme Precipitation	2.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.0
AQ-PM	50.1
AQ-DPM	33.9

Drinking Water	99.8
Lead Risk Housing	28.5
Pesticides	87.0
Toxic Releases	21.8
Traffic	31.7
Effect Indicators	—
CleanUp Sites	4.12
Groundwater	52.4
Haz Waste Facilities/Generators	54.6
Impaired Water Bodies	66.7
Solid Waste	75.7
Sensitive Population	—
Asthma	50.8
Cardio-vascular	77.7
Low Birth Weights	86.8
Socioeconomic Factor Indicators	—
Education	68.8
Housing	12.0
Linguistic	61.9
Poverty	52.5
Unemployment	40.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	58.77069165

Employed	40.16424997
Median HI	63.15924548
Education	—
Bachelor's or higher	36.40446555
High school enrollment	20.46708585
Preschool enrollment	39.62530476
Transportation	—
Auto Access	84.51174131
Active commuting	29.75747466
Social	—
2-parent households	95.8937508
Voting	58.07776209
Neighborhood	—
Alcohol availability	93.60964969
Park access	27.678686
Retail density	8.700115488
Supermarket access	17.15642243
Tree canopy	58.29590658
Housing	—
Homeownership	88.78480688
Housing habitability	96.44552804
Low-inc homeowner severe housing cost burden	77.08199666
Low-inc renter severe housing cost burden	96.70216861
Uncrowded housing	52.3675093
Health Outcomes	—
Insured adults	47.32452201
Arthritis	82.7

Asthma ER Admissions	57.7
High Blood Pressure	39.5
Cancer (excluding skin)	82.6
Asthma	76.7
Coronary Heart Disease	87.2
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	55.5
Life Expectancy at Birth	57.0
Cognitively Disabled	28.0
Physically Disabled	26.6
Heart Attack ER Admissions	42.9
Mental Health Not Good	61.1
Chronic Kidney Disease	85.5
Obesity	74.1
Pedestrian Injuries	84.5
Physical Health Not Good	65.0
Stroke	75.8
Health Risk Behaviors	—
Binge Drinking	89.9
Current Smoker	51.2
No Leisure Time for Physical Activity	32.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	50.1
Elderly	24.7
English Speaking	36.6

Foreign-born	63.8
Outdoor Workers	62.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	76.9
Traffic Density	44.9
Traffic Access	0.0
Other Indices	—
Hardship	50.9
Other Decision Support	—
2016 Voting	35.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	56.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses consistent with the land uses provided in Table 2.0-3 of the Draft EIR Chapter 2.0: Project Description. For the purposes of modeling: LDR and MDR assumed to be all single-family (total of 1,217 units, 191.6 acres), consistent with the Project Description; HDR assumed to be all Apartments Low Rise (194 units, 9.5 acres); Park area = 12.2 acres of parks and recreation plus 18.5 acres of open space and rights of way = 30.7 acres; Asphalt surfaces assumed for remainder of Development area = 4.5 acres. Total acreage = 236.3 total development area.
Construction: Construction Phases	No demolition. Construction schedule adjusted to reflect assumed buildout schedule of 2028. Start date for construction assumed to be beginning of 2025, based on current information. Architectural coating phase assumed to overlap with tail end of building construction phase.
Operations: Hearths	No hearths or wood stoves.
Operations: Consumer Products	Revised General Category consumer products emissions factor to reflect CARB adjustments applied to their Consumer and Commercial Product Survey Emission data, made after the 2008 consumer products emissions factor. Adjustment made to reflect average adjustment factor. See for further detail: https://ww2.arb.ca.gov/our-work/programs/consumer-products-program/consumer-products-emissions-inventory 0.0000107

EXHIBIT 1

Source: EMFAC2021 (v1.0.1) Emissions Inventory

Region Type: County

Region: San Joaquin

Calendar Year: 2023, 2025

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Trips	Fuel Consumption	MPG
San Joaquin	2023	All Other Buses	Aggregate	Aggregate	Diesel	63.39460475	3393.93922	564.2119822	0.391421545	8.670803
San Joaquin	2023	LDA	Aggregate	Aggregate	Gasoline	246367.0682	9973102.47	1138235.391	349.3216614	28.54991
San Joaquin	2023	LDA	Aggregate	Aggregate	Diesel	705.734891	23139.8254	3023.214022	0.543997543	42.53664
San Joaquin	2023	LDT1	Aggregate	Aggregate	Gasoline	22016.87719	727225.714	95173.38769	30.52486616	23.82404
San Joaquin	2023	LDT1	Aggregate	Aggregate	Diesel	6.309776167	72.3140659	18.53577151	0.002954101	24.47922
San Joaquin	2023	LDT2	Aggregate	Aggregate	Gasoline	99986.64004	4006976.31	463638.6569	174.3583341	22.98127
San Joaquin	2023	LDT2	Aggregate	Aggregate	Diesel	269.0353638	11767.7731	1277.639106	0.369317903	31.86353
San Joaquin	2023	LHD1	Aggregate	Aggregate	Gasoline	9831.305478	343356.563	146471.803	37.0137846	9.276451
San Joaquin	2023	LHD1	Aggregate	Aggregate	Diesel	8858.793592	311287.78	111432.479	19.67413691	15.82218
San Joaquin	2023	LHD2	Aggregate	Aggregate	Gasoline	1172.202392	40932.8123	17464.06906	4.90823024	8.339628
San Joaquin	2023	LHD2	Aggregate	Aggregate	Diesel	3130.564849	115648.086	39378.56755	8.863291415	13.04798
San Joaquin	2023	MCY	Aggregate	Aggregate	Gasoline	12111.77426	65765.9483	24223.54852	1.643730409	40.01018
San Joaquin	2023	MDV	Aggregate	Aggregate	Gasoline	94539.47242	3309649.73	427287.8869	178.486066	18.5429
San Joaquin	2023	MDV	Aggregate	Aggregate	Diesel	1386.649679	54072.4946	6485.715736	2.267270858	23.84916
San Joaquin	2023	MH	Aggregate	Aggregate	Gasoline	1507.494843	13134.1796	150.8097841	2.977418428	4.411264
San Joaquin	2023	MH	Aggregate	Aggregate	Diesel	642.7961913	5646.6428	64.27961913	0.600452961	9.403972
San Joaquin	2023	Motor Coach	Aggregate	Aggregate	Diesel	17.50069597	2493.47591	402.1659934	0.455354651	5.475899
San Joaquin	2023	OBUS	Aggregate	Aggregate	Gasoline	184.2186442	8143.5346	3685.846633	1.733278965	4.69834
San Joaquin	2023	PTO	Aggregate	Aggregate	Diesel	0	19769.5175	0	4.013121008	4.92622
San Joaquin	2023	SBUS	Aggregate	Aggregate	Gasoline	127.6658449	7011.40481	510.6633795	0.69096273	10.1473
San Joaquin	2023	SBUS	Aggregate	Aggregate	Diesel	488.0661519	10999.7571	7067.197879	1.346323697	8.170217
San Joaquin	2023	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.21525791	684.779876	234.7466267	0.077405114	8.846701
San Joaquin	2023	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	13.70885779	939.491781	315.0295519	0.106056052	8.858446
San Joaquin	2023	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	43.24157557	2453.39435	993.6914066	0.273109788	8.98318
San Joaquin	2023	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	74.64743229	15398.8197	1715.397994	1.609252898	9.568925 MHD
San Joaquin	2023	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	243.75384	8276.65194	3478.367297	1.005561316	8.230877 8.579141
San Joaquin	2023	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	156.2432876	5383.85911	2229.591714	0.657027122	8.194272
San Joaquin	2023	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	682.6025228	23363.9411	9740.738001	2.839033489	8.229541
San Joaquin	2023	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	122.4768589	6703.21055	1747.744776	0.802391793	8.354037
San Joaquin	2023	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	449.8451938	18399.4289	5200.21044	2.166542487	8.492531
San Joaquin	2023	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	1174.570894	51943.6226	13578.03953	6.096265009	8.520565
San Joaquin	2023	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	912.5417949	38573.6428	10548.98315	4.50612298	8.560273
San Joaquin	2023	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	553.092214	25667.2012	6393.745994	2.950154535	8.70029
San Joaquin	2023	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	10.69132111	510.925844	123.591672	0.060247854	8.480399
San Joaquin	2023	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	696.5366058	42802.4924	8051.963163	4.748833943	9.013264
San Joaquin	2023	T6 OOS Class 4	Aggregate	Aggregate	Diesel	5.905142679	392.334655	135.7001788	0.044317954	8.852725
San Joaquin	2023	T6 OOS Class 5	Aggregate	Aggregate	Diesel	7.890998517	538.212595	181.3351459	0.060737656	8.861267
San Joaquin	2023	T6 OOS Class 6	Aggregate	Aggregate	Diesel	24.97157764	1406.36491	573.8468541	0.156409596	8.991551
San Joaquin	2023	T6 OOS Class 7	Aggregate	Aggregate	Diesel	40.57354344	10226.0217	932.3800283	1.062980063	9.620144
San Joaquin	2023	T6 Public Class 4	Aggregate	Aggregate	Diesel	32.09216486	1056.60486	164.6328057	0.140824099	7.503012
San Joaquin	2023	T6 Public Class 5	Aggregate	Aggregate	Diesel	76.27568061	2776.64108	391.2942415	0.361173048	7.687841
San Joaquin	2023	T6 Public Class 6	Aggregate	Aggregate	Diesel	126.4582156	4446.297	648.7306462	0.576020372	7.718993
San Joaquin	2023	T6 Public Class 7	Aggregate	Aggregate	Diesel	152.7305258	6768.06936	783.5075973	0.883776286	7.658125
San Joaquin	2023	T6 Utility Class 5	Aggregate	Aggregate	Diesel	33.47606031	1364.93307	428.493572	0.154770907	8.819055
San Joaquin	2023	T6 Utility Class 6	Aggregate	Aggregate	Diesel	6.356456131	257.430851	81.36263848	0.029104667	8.845002
San Joaquin	2023	T6 Utility Class 7	Aggregate	Aggregate	Diesel	7.230830053	358.500092	92.55462468	0.040337535	8.887506
San Joaquin	2023	T6T5	Aggregate	Aggregate	Gasoline	560.525111	27400.6685	11214.98642	5.873758607	4.664929
San Joaquin	2023	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1500.771839	308143.872	34487.73687	51.00604804	6.04132 HHD
San Joaquin	2023	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1343.474448	364734.036	30873.04281	59.83110996	6.09606 5.596459
San Joaquin	2023	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	562.3598205	132501.396	12923.02868	21.97566159	6.029461
San Joaquin	2023	T7 Other Port Class 8	Aggregate	Aggregate	Diesel	28.6781176	5381.65764	469.174004	0.90785985	5.927851
San Joaquin	2023	T7 POAK Class 8	Aggregate	Aggregate	Diesel	131.1211785	13188.0173	2145.142481	2.26470624	5.823279
San Joaquin	2023	T7 POLA Class 8	Aggregate	Aggregate	Diesel	139.588006	18353.09	2283.659779	3.154875131	5.817374
San Joaquin	2023	T7 Public Class 8	Aggregate	Aggregate	Diesel	387.066761	16533.9411	1985.652484	3.205449572	5.158072
San Joaquin	2023	T7 Single Concrete/Transit Mix Class 8	Aggregate	Aggregate	Diesel	118.1878034	8595.90453	1113.329108	1.467125303	5.859012
San Joaquin	2023	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	486.5561857	30707.0394	4583.359269	5.327318734	5.76407
San Joaquin	2023	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1040.735731	57042.4876	9803.730584	9.736964144	5.858344
San Joaquin	2023	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	175.044521	11346.9523	805.2047965	4.507153801	2.517543
San Joaquin	2023	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	2638.276559	211937.817	38334.1584	34.91925222	6.069369
San Joaquin	2023	T7 Utility Class 8	Aggregate	Aggregate	Diesel	23.22093261	1080.67322	297.2279374	0.186573576	5.792209
San Joaquin	2023	T7I5	Aggregate	Aggregate	Gasoline	2.419215607	60.0081934	48.40366587	0.018776223	3.195967
San Joaquin	2023	UBUS	Aggregate	Aggregate	Gasoline	49.369827	3719.55506	197.479308	0.791708132	4.698139
San Joaquin	2023	UBUS	Aggregate	Aggregate	Diesel	78.33872382	5427.523	313.3548953	0.602229331	9.012386
San Joaquin	2025	All Other Buses	Aggregate	Aggregate	Diesel	67.92171408	3454.27959	604.5032553	0.395338932	8.737514
San Joaquin	2025	LDA	Aggregate	Aggregate	Gasoline	247812.193	10065418.7	1143376.643	340.6379829	29.54873
San Joaquin	2025	LDA	Aggregate	Aggregate	Diesel	620.8563183	19917.7375	2643.071074	0.459921869	43.30678
San Joaquin	2025	LDT1	Aggregate	Aggregate	Gasoline	20969.62889	704503.526	90823.61908	28.55436416	24.67236
San Joaquin	2025	LDT1	Aggregate	Aggregate	Diesel	5.057977491	54.7985719	14.33247387	0.002232746	24.54313
San Joaquin	2025	LDT2	Aggregate	Aggregate	Gasoline	105887.2734	4297523.94	491668.9279	179.0193905	24.00591
San Joaquin	2025	LDT2	Aggregate	Aggregate	Diesel	305.5941154	13558.4186	1463.961841	0.410704288	33.01261
San Joaquin	2025	LHD1	Aggregate	Aggregate	Gasoline	9450.489324	335570.018	140798.2097	34.90157426	9.614753
San Joaquin	2025	LHD1	Aggregate	Aggregate	Diesel	8447.684296	292201.982	106261.2413	18.38163512	15.89641
San Joaquin	2025	LHD2	Aggregate	Aggregate	Gasoline	1129.168714	39496.2437	16822.93138	4.600897482	8.584465
San Joaquin	2025	LHD2	Aggregate	Aggregate	Diesel	3098.911716	112092.227	38980.41096	8.493201579	13.19788
San Joaquin	2025	MCY	Aggregate	Aggregate	Gasoline	12009.69999	64631.0827	24019.39998	1.598967718	40.42051
San Joaquin	2025	MDV	Aggregate	Aggregate	Gasoline	92446.53152	3253692.9	417141.1232	169.0306745	19.24913
San Joaquin	2025	MDV	Aggregate	Aggregate	Diesel	1393.091492	51951.9772	6420.977754	2.139013823	24.28782
San Joaquin	2025	MH	Aggregate	Aggregate	Gasoline	1345.73466	11738.0981	134.6272954	2.660033836	4.412763
San Joaquin	2025	MH	Aggregate	Aggregate	Diesel	331.6240768	5453.24118	63.16240768	0.580283559	9.397546
San Joaquin	2025	Motor Coach	Aggregate	Aggregate	Diesel	18.80772922	2514.51501	432.2016174	0.452917647	5.551815
San Joaquin	2025	OBUS	Aggregate	Aggregate	Gasoline	170.8324994	7309.03024	3418.016649	1.52248184	4.800734

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San Joaquin	2025 PTO	Aggregate	Aggregate	Diesel	0	20105.4227	0	3.98427046	5.046199
San Joaquin	2025 SBUS	Aggregate	Aggregate	Gasoline	131.6189784	7271.29468	526.4759134	0.71341232	10.19228
San Joaquin	2025 SBUS	Aggregate	Aggregate	Diesel	490.2787139	10849.6548	7099.235777	1.320741795	8.214819 MHD
San Joaquin	2025 T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.57610418	697.742444	243.038874	0.077548733	8.997471 8.711536
San Joaquin	2025 T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	14.00551629	958.755772	321.8467643	0.106617779	8.992457
San Joaquin	2025 T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	47.2956683	2488.35531	1086.854424	0.272426579	9.13404
San Joaquin	2025 T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	78.11014265	15772.0773	1794.971078	1.605687139	9.822634
San Joaquin	2025 T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	252.424868	8475.97193	3602.102866	1.019116289	8.316982
San Joaquin	2025 T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	162.4907366	5516.89416	2318.742812	0.666350411	8.279269
San Joaquin	2025 T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	708.1406495	23932.0747	10105.16707	2.87788442	8.315857
San Joaquin	2025 T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	127.2799027	6929.15534	1816.284212	0.825964977	8.389164
San Joaquin	2025 T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	457.3843802	18839.146	5287.363435	2.200026822	8.563144
San Joaquin	2025 T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	1233.945904	53254.2945	14264.41465	6.208167542	8.578102
San Joaquin	2025 T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	939.5521797	39531.7219	10861.2232	4.582174014	8.627285
San Joaquin	2025 T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	601.2468734	26326.7381	6950.413857	3.002944814	8.766974
San Joaquin	2025 T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	11.09411194	521.271565	128.2479341	0.060836197	8.568444
San Joaquin	2025 T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	742.8431118	44239.5012	8587.266373	4.878765067	9.067766
San Joaquin	2025 T6 OOS Class 4	Aggregate	Aggregate	Diesel	6.191325924	405.515484	142.2766697	0.044545776	9.103343
San Joaquin	2025 T6 OOS Class 5	Aggregate	Aggregate	Diesel	8.158025029	556.294323	187.4714152	0.061223253	9.086324
San Joaquin	2025 T6 OOS Class 6	Aggregate	Aggregate	Diesel	27.75525515	1453.61298	637.8157633	0.156720574	9.275189
San Joaquin	2025 T6 OOS Class 7	Aggregate	Aggregate	Diesel	42.05361037	10569.5739	966.3919663	1.066856767	9.90721
San Joaquin	2025 T6 Public Class 4	Aggregate	Aggregate	Diesel	30.96340517	1050.77782	158.8422685	0.137051326	7.667039
San Joaquin	2025 T6 Public Class 5	Aggregate	Aggregate	Diesel	77.40598482	2785.90976	397.0927021	0.357713881	7.788095
San Joaquin	2025 T6 Public Class 6	Aggregate	Aggregate	Diesel	124.4648645	4446.56253	638.5047549	0.566454177	7.849819
San Joaquin	2025 T6 Public Class 7	Aggregate	Aggregate	Diesel	148.2002736	6742.4666	760.2674038	0.856702113	7.870258
San Joaquin	2025 T6 Utility Class 5	Aggregate	Aggregate	Diesel	33.80713566	1371.26265	432.7313364	0.154052822	8.90125
San Joaquin	2025 T6 Utility Class 6	Aggregate	Aggregate	Diesel	6.404694197	258.753793	81.98008572	0.028984726	8.927246
San Joaquin	2025 T6 Utility Class 7	Aggregate	Aggregate	Diesel	7.233394318	359.399463	92.58744727	0.039964166	8.993043
San Joaquin	2025 T6TS	Aggregate	Aggregate	Gasoline	531.0756316	27321.54	10625.76124	5.695995374	4.796623 HHD
San Joaquin	2025 T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1559.383676	317454.145	35834.63687	51.17555421	6.203238 5.689878
San Joaquin	2025 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1399.986354	379791.503	32171.68641	59.50406302	6.382615
San Joaquin	2025 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	592.9033383	137971.507	13624.91871	22.13949036	6.231919
San Joaquin	2025 T7 Other Port Class 8	Aggregate	Aggregate	Diesel	31.09466321	5773.39367	508.7086901	0.965450648	5.979999
San Joaquin	2025 T7 POAK Class 8	Aggregate	Aggregate	Diesel	137.4284865	13680.6366	2248.330039	2.333991731	5.861476
San Joaquin	2025 T7 POLA Class 8	Aggregate	Aggregate	Diesel	157.478818	19849.822	2576.353462	3.419583803	5.804748
San Joaquin	2025 T7 Public Class 8	Aggregate	Aggregate	Diesel	386.4284577	16615.451	1982.377988	3.157962941	5.261446
San Joaquin	2025 T7 Single Concrete/Transit Mix Class 8	Aggregate	Aggregate	Diesel	121.0999578	8533.43151	1140.761603	1.428680336	5.972947
San Joaquin	2025 T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	518.3758674	30855.2217	4883.100671	5.328325632	5.790791
San Joaquin	2025 T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1163.187559	58572.1124	10957.22681	9.897066107	5.918129
San Joaquin	2025 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	167.5568448	10862.3368	770.7614863	4.227120943	2.569677
San Joaquin	2025 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	2947.082282	219605.844	42821.10556	35.73125002	6.146040
San Joaquin	2025 T7 Utility Class 8	Aggregate	Aggregate	Diesel	24.5522509	1096.54573	314.2688115	0.187591616	5.845388
San Joaquin	2025 T7IS	Aggregate	Aggregate	Gasoline	1.372290651	54.2951776	27.45679134	0.014900233	3.643915
San Joaquin	2025 UBUS	Aggregate	Aggregate	Gasoline	50.67993554	3818.16315	202.7197421	0.812722391	4.697992
San Joaquin	2025 UBUS	Aggregate	Aggregate	Diesel	73.34639924	4977.17265	293.3855969	0.526331001	9.456355

On-road Mobile (Operational) Energy Usage

Unmitigated:

Step 1:

Therefore:
Average Daily VMT:
96,884 Source: WK Shijo Consulting, 2023

Step 2:

Given:

Fleet Mix (CalEEMod Output)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
37.37%	3.63%	11.71%	10.11%	1.74%	0.42%	0.87%	32.21%	0.03%	0.02%	1.58%	0.08%	0.23%

And:

Gasoline MPG Factors for each Vehicle Class - Year 2025 (EMFAC2021 Output)

LDA	LDT1	LDT2	MDV	MCY	MH
29.549	24.672	24.006	19.249	40.421	4.413

Diesel MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 Output)

LHD1	LHD2	MHD	HHD	OBUS	UBUS	SBUS
15.896	13.198	8.712	5.690	4.801	9.456	8.215

Therefore:

Weighted Average MPG Factors

Gasoline:	26.8	Diesel:	6.4
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Step 3:

Therefore:

2,334	daily gallons of gasoline	5,395	daily gallons of diesel
or			
851,728	annual gallons of gasoline	1,969,247	annual gallons of diesel

Off-road Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source.

Given Factor:	1,054.8 metric tons	CO2	(provided in CalEEMod Output File)
Conversion Factor:	2204.6262 pounds	per metric ton	
Intermediate Result:	2,325,396 pounds	CO2	
Conversion Factor:	22.38 pounds	CO2 per 1 gallon of diesel fuel	Source: U.S. EIA, 2016
Final Result:	103,905 gallons	diesel fuel	http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11

Mitigated Onsite Scenario	Total CO2 (MT/yr) (provided in CalEEMod Output File)
Site Preparation	145
Grading	180

On-road Mobile (Construction) Energy Usage - Site Preparation

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**
18

Worker Trip Length (miles) (CalEEMod Output)
11.9

Therefore:
Average Worker Daily VMT:
214

Step 2: Given:
Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)
LDA LDT1 LDT2
0.5 0.25 0.25

And:
Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023
LDA LDT1 LDT2
28.55 23.82 22.98

Therefore:
Weighted Average Worker MPG Factor
26.0

Step 3: **Therefore:**
8.2 Worker daily gallons of gasoline

Step 4: 60 # of Days (CalEEMod Output)

Therefore:
Result: 495 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Grading

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1:	Total Daily Worker Trips (CalEEMod Output)				Total Hauling Trips (CalEEMod Output)			
	20				-			
	Worker Trip Length (miles) (CalEEMod Output)				Hauling Trip Length (miles) (CalEEMod Output)			
	11.9				20			
	Therefore:				Average Vendor Daily VMT:			
	Average Worker Daily VMT:				-			
	238							
Step 2:	Given:							
	Assumed Fleet Mix for Workers				Fleet Mix for Workers (Conservative Estimate)			
	LDA	LDT1	LDT2		MHD	HHD		
	0.5	0.25	0.25		0%	100%		
	(Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)							
	And:							
	Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023				Diesel:			
	LDA	LDT1	LDT2		MHD	HHD		
	28.55	23.82	22.98		8.58	5.60		
		Therefore:				Weighted Average Hauling (Diesel) MPG Factor		
	Weighted Average Worker MPG Factor				5.6			
	26.0							
Step 3:	Therefore:							
	9.2 Worker daily gallons of gasoline							
Step 4:	60 # of Days (CalEEMod Output)							
	Therefore:				Therefore:			
Result:	550 Total gallons of gasoline				- Total gallons of diesel			

On-road Mobile (Construction) Energy Usage - Building Construction

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1:	Total Daily Worker Trips (CalEEMod Output)			Total Daily Vendor Trips (CalEEMod Output)		
	578			151		
	Note: Assumes 5% of workers are on-site on a given day.			Note: Assumes 5% of workers are on-site on a given day.		
	Worker Trip Length (miles) (CalEEMod Output)			Vendor Trip Length (miles) (CalEEMod Output)		
			11.9			
			Therefore:			
			Average Worker Daily VMT:	Average Vendor Daily VMT:		
			344	69		
Step 2:	Given:					
	Assumed Fleet Mix for Workers			(Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)		
	LDA	LDT1	LDT2	Fleet Mix for Workers (CalEEMod Output)		
	0.5	0.25	0.25	MHD	HHD	
Assumed Fleet Mix for Vendors				100%	0%	
			And:			
			MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2023			
			Gasoline:	Diesel:		
			LDA	LDT1	LDT2	
			28.55	23.82	22.98	
				MHD	HHD	
				8.58	5.60	
			Therefore:			
			Weighted Average Worker (Gasoline) MPG Factor	Weighted Average Vendor (Diesel) MPG Factor		
			26.0	8.6		
Step 3:	Therefore:			Therefore:		
	13 Worker daily gallons of gasoline			8 Vendor daily gallons of diesel		
Step 4:	600 # of Days (CalEEMod Output)					
	Therefore:			Therefore:		
			7,944 Total gallons of gasoline	4,805 Total gallons of diesel		

On-road Mobile (Construction) Energy Usage - Paving

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**
15

Worker Trip Length (miles) (CalEEMod Output)
11.9

Therefore:
Average Worker Daily VMT:
179

Step 2: Given:
Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)
LDA LDT1 LDT2
0.5 0.25 0.25

And:
Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023
LDA LDT1 LDT2
28.55 23.82 22.98

Therefore:
Weighted Average Worker MPG Factor
26.0

Step 3: **Therefore:**
6.9 Worker daily gallons of gasoline

Step 4: 100 # of Days (CalEEMod Output)

Therefore:
Result: 687 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Architectural Coating

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**
116

Worker Trip Length (miles) (CalEEMod Output)
11.9

Therefore:
Average Worker Daily VMT:
1,380

Step 2: Given:
Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)
LDA LDT1 LDT2
0.5 0.25 0.25

And:
Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023
LDA LDT1 LDT2
28.55 23.82 22.98

Therefore:
Weighted Average Worker MPG Factor
26.0

Step 3: **Therefore:**
53.1 Worker daily gallons of gasoline

Step 4: 100 # of Days (CalEEMod Output)

Therefore:
Result: 5,314 Total gallons of gasoline

EXHIBIT 1

Source: EMFAC2021 (v1.0.1) Emission Rates

Region Type: County

Region: San Joaquin

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Total VMT	PM10_RUNEX
San Joaquin	2022	T7 Tractor Class 8	Aggregate		10 Diesel	1683.346604	0.014003507
San Joaquin	2022	T7 Tractor Class 8	Aggregate		55 Diesel	20401.71991	0.02163113

Mobile Truck Emissions**On-site Pickup, Loading, and Return for Storage**

pounds per gram: 0.002205
 hours per day: 24

Line Source Volume #1:

Assumptions:

1. Total travel distance per truck trip (one-day):
2. # of HDD trucks trips per day:
3. PM10 Mobile Emissions Factor:
(San Joaquin County, 10 MPH, Year 2022, T7 Tractor Class 8)

Factor:

0.5 miles
 114.4 trips
0.014003507 g/mile

Source:

As measured by Google Maps (conservative estimate)
 Fehr & Peers, 2022
 EMFAC2021

Therefore:

Total daily PM10 mobile emissions generated by the project along this line volume source:

0.800676879 g/day-all vehicles
 0.001765188 lbs/day-all vehicles

0.644293715 lbs/year-all vehicles

Max Hr Emissions

11.1 Peak hour truck trips (Fehr & Peers, 2022)

0.077850544 g/hr-all vehicles**0.000171631 lbs/hr-all vehicles**

Mobile Truck Emissions**Off-site (0.25 miles distance)**

pounds per gram: 0.002205

hours per day: 24

Line Source Volume #1:

Assumptions:

1. Total travel distance per truck trip (one-day):
2. # of trucks trips per day:
3. PM10 Mobile Emissions Factor:
(San Joaquin County, 55 MPH, Year 2022, T7 Tractor Class 8)

Factor:

0.25 miles

114.4 trips

0.02163113 g/mileSource:

As measured by Google Maps (conservative estimate)

Fehr & Peers, 2022

EMFAC2021

Therefore:

Total daily PM10 mobile emissions generated by the project along this line volume source:

0.618400293 g/day-all vehicles

0.001363338 lbs/day-all vehicles

0.497618243 lbs/year-all vehicles

Max Hr Emissions

11.1 Peak hour truck trips (Fehr & Peers, 2022)

0.060127625 g/hr-all vehicles**0.000132559 lbs/hr-all vehicles**

Truck Idling Emission Rates

Idling Emission Rates taken from tables 3.2-41 and 42, of the EMFAC2014 Volume III - Technical Documentation Guidebook:

<http://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf>

pounds per gram: 0.00220462

Idling Emissions:

Table 3.2-40: Revised HHD Diesel Truck Low Idle Emission Rates (after 2009)

PM10 0.001 g/hr-truck

Table 3.2-41: High Idle Emissions Rates for Summer (2009 and later)

PM10 0.003 g/hr-truck

Table 3.2-42: High Idle Emissions Rates for Winter (2009 and later)

PM10 0.004 g/hr-truck

Note: the following calculation uses an average of the summer and winter high idle emissions rates for the emission factor calcs.

0.000291667 g/5 minutes-truck

Note: Trucks are equipped with 5-min auto shutoff.

0.000291667 g/day-truck

24 hours in day

57 # of trucks/day

Source: Fehr & Peers, 2022

2 Idle Points per truck/day

Note: Assumption

Therefore:

0.033353182 g/day-all trucks

12.1739113 g/year-all trucks

0.026838848 lbs/year-all trucks

0.030980423

Max Hr Emissions

11.1 Peak hour truck trips (Fehr & Peers, 2022)

0.0064859 g/hr-all vehicles

0.0000143 lbs/hr-all vehicles

Construction - DPM Exhaust Emissions

pounds per ton:

2000

Note: DPM Exhaust Emissions taken from CalEEMod

CalEEMod - Maximum Annual Construction Emissions

Exhaust PM2.5 tons/year (total)

Exhaust PM2.5 pounds/year

0.1

200

Total

Amoritized over 70 Years

2.857142857 lbs/year

0.000326 lbs/hour

Totals

4.025894 lbs/year

0.000645 Max hr emissions

[illegible]

EXHIBIT 1

Receptor Proximity and Proximity Factors		1-0 p1	1-0 p1	1-0 p1	1-0 p1	Total Max Score
		Max Score	Max Score	Max Score	Max Score	
0< R<100	1.000	9.31E+00	0.00E+00	0.00E+00	0.00E+00	9.31E+00
100≤R<250	0.250	2.33E+00	0.00E+00	0.00E+00	0.00E+00	2.33E+00
250≤R<500	0.040	3.72E-01	0.00E+00	0.00E+00	0.00E+00	3.72E-01
500≤R<1000	0.011	1.02E-01	0.00E+00	0.00E+00	0.00E+00	1.02E-01
1000≤R<1500	0.003	2.79E-02	0.00E+00	0.00E+00	0.00E+00	2.79E-02
1500≤R<2000	0.002	1.86E-02	0.00E+00	0.00E+00	0.00E+00	1.86E-02
2000<R	0.001	9.31E-03	0.00E+00	0.00E+00	0.00E+00	9.31E-03