

Exhibit B

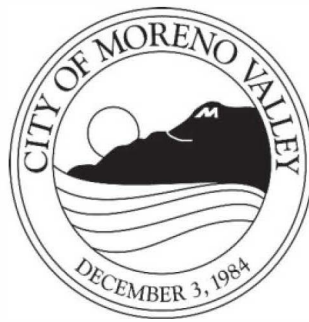
**Final Environmental Impact Report with Appendices and
Mitigation Monitoring and Reporting Program**

Final Environmental Impact Report

SCH No. 2022040417

Town Center at Moreno Valley Specific Plan Project

PEN21-0334, PEN21-0335,
PEN22-0077, and PEN25-0007



Lead Agency:

City of Moreno Valley

14177 Frederick Street
Moreno Valley, CA 92552

May 2025

Final Environmental Impact Report SCH No. 2022040417

Town Center at Moreno Valley Specific Plan City of Moreno Valley, California

Lead Agency

City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552

CEQA Consultant

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

Project Applicant

Lewis Acquisition Company, LLC
1156 North Mountain Avenue
Upland, CA 91785

Lead Agency Discretionary Permits

General Plan Amendment (PEN25-0007)
Change of Zone (PEN21-0335)
TCMV Specific Plan (PEN21-0334)
Tentative Tract Map No. 38421 (PEN22-0077)

May 2025

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FINAL EIR APPENDICES

Appendix A Construction Health Risk Assessment



1.0 INTRODUCTION

1.1 CONTENT OF THIS FINAL EIR

This Final Environmental Impact Report (EIR) for the Town Center at Moreno Valley (TCMV) Specific Plan Project (Project) was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 *et seq.*) and CEQA Guidelines (Title 14, California Code of Regulations, Section 15000 *et seq.*).

According to CEQA Guidelines Section 15132, the final EIR shall consist of:

- a. The draft EIR or a revision of the draft.
- b. Comments and recommendations received on the draft EIR either verbatim or in summary.
- c. A list of persons, organizations, and public agencies commenting on the draft EIR.
- d. The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- e. Any other information added by the Lead Agency.

The purpose of the Final EIR is to respond to all comments received by the City of Moreno Valley, the CEQA lead agency, regarding the environmental information and analyses contained in the Draft EIR. Additionally, any clarifications/revisions to the Draft EIR generated from responses to comments are stated in this Final EIR, which includes the Draft EIR, as modified per the clarifications and revisions presented in Section 3.0 of this document.

In addition to the Final EIR (including supporting technical appendices), the City of Moreno Valley will also consider adoption of a Mitigation Monitoring and Reporting Plan (MMRP) (included as Section 4.0 of this document), a Statement of Findings of Fact, a Statement of Overriding Considerations, staff reports, and Resolutions as part of the approval process for the proposed Project.

This Final EIR document was prepared in accordance with CEQA and the CEQA Guidelines and represents the independent judgment of the City of Moreno Valley.

1.2 PUBLIC REVIEW OF DRAFT EIR

As required by CEQA Guidelines Section 15087, a Notice of Completion (NOC) and a Notice of Availability (NOA) of the Draft EIR for the Project was filed with the State Clearinghouse (SCH) on the SCH CEQAnet web portal on February 14, 2025, and the NOA of the Draft EIR was also filed with the Riverside County Clerk. The Draft EIR was circulated for public review from February 14, 2025, to April 10, 2025. The NOA was sent to responsible agencies and other interested agencies and parties on February 14, 2025, and was also posted in the Press Enterprise (the newspaper of general circulation in the area affected by the Project) on February 14, 2025. Copies of the Draft EIR were also made available for public review in person at City Hall, located at 14177 Frederick Street, Moreno Valley and on the City's website at <http://www.moreno-valley.ca.us/cdd/documents/about-projects.html>.

2.0 RESPONSES TO DRAFT EIR COMMENTS

2.1 LIST OF DRAFT EIR COMMENTERS

The City of Moreno Valley received seven comment letters/emails in response to the Draft EIR. A list of the agencies and organizations that submitted comments on the Draft EIR is presented in Table 2-1, Public Agencies and Organizations that Commented on the Draft EIR.

Table 2-1 Public Agencies and Organizations that Commented on the Draft EIR

Comment Letter/Email	Commenting Party	Date
A	California Department of Toxic Substances Control (DTSC)	2/24/2025
B	Riverside County Airport Land Use Commission (RCALUC)	2/27/2025
C	Eastern Municipal Water District (EMWD)	3/13/2025
D	City of Riverside, Community & Economic Development Department	4/10/2025
E	Sierra Club, Moreno Valley/Box Springs Group (Letter)	4/10/2025
F	Sierra Club, Moreno Valley/Box Springs Group (Email)	4/10/2025
G	Mitchell M. Tsai Law Firm (on behalf of Western States Regional Council of Carpenters)	4/10/2025

2.2 CEQA REQUIREMENTS

CEQA Guidelines Section 15088 requires the Lead Agency to evaluate comments received from public agencies and interested parties who reviewed the Draft EIR and to provide written responses with good faith and reasoned analysis to comments that relate to significant environmental issues. Comments that address environmental concerns have been thoroughly addressed.

Section 15088 of the State CEQA Guidelines, Evaluation of and Response to Comments, states:

- a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments raising significant environmental issues received during the noticed comment period and any extensions and may respond to late comments.
- b) The lead agency shall provide a written proposed response, either in a printed copy or in an electronic format, to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.
- c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail,



giving the reasons that specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice. The level of detail contained in the response, however, may correspond to the level of detail provided in the comment (i.e., responses to general comments may be general). A general response may be appropriate when a comment does not contain or specifically refer to readily available information, or does not explain the relevance of evidence submitted with the comment.

- d) The responses to comments may take the form of a revision to the draft EIR or may be a separate section in the final EIR. Where the responses to comments makes important changes in the information contained in the text of the draft EIR, the lead agency should either:
 - 1. Revise the text in the body of the EIR; or
 - 2. Include marginal notes showing that the information is revised in the responses to comments.

Copies of each of the seven comment letters/emails referenced in Table 2-1 are provided on the following pages, followed by responses to each individual comment.

Revisions to the Draft EIR have been prepared to make minor corrections and clarifications to the Draft EIR as a result of comments received during the public review period (refer to Section 3.0, Draft EIR Clarifications and Revisions, of this document). Therefore, this Response to Comments section, along with the Draft EIR Clarifications and Revisions and MMRP, are included as part of this Final EIR along with the Draft EIR for consideration by the City of Moreno Valley prior to a vote to certify the Final EIR.



COMMENT LETTER A



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
Sacramento, California 95826-3200
dtsc.ca.gov



Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

February 24, 2025

Emily Elliott, AICP
Contract Planner
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553
planning@moval.org

RE: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE TOWN CENTER AT
MORENO VALLEY SPECIFIC PLAN PROJECT DATED FEBRUARY 14, 2025, STATE
CLEARINGHOUSE NUMBER [2022040417](#)

Dear Emily Elliott,

The Department of Toxic Substances Control (DTSC) reviewed the Draft Environmental
Impact Report (DEIR) for the Town Center at Moreno Valley Specific Plan Project
(Project). The Project includes:

- Certification of the Final Environmental Impact Report,
- A General Plan Amendment to change the land use designation for the
Project Site from Public Facilities to Residential, Open Space, and
Commercial to allow a mixed-use development with residential, commercial,
park, and civic uses,
- A Specific Plan involving a mixed-use development consisting of residential,
commercial/civic, and open spaces uses, and,
- A Tentative Tract Map involving a subdivision of the Project Site into six
residential-use lots, one commercial-use lot, two open space lots, and
associated dedicated areas for necessary infrastructure.

A-1



Emily Elliott, AICP
February 24, 2025
Page 2

DTSC recommends and requests consideration of the following comments:

1. When agricultural crops and/or land uses are proposed or rezoned for residential use, a number of contaminants of concern (COCs) can be present. The Lead Agency shall identify the amounts of Pesticides and Organochlorine Pesticides (OCPs) historically used on the property. If present, OCPs requiring further analysis are dichloro-diphenyl-trichloroethane, toxaphene, and dieldrin. Additionally, any level of arsenic present would require further analysis and sampling and must meet [HHRA NOTE NUMBER 3, DTSC-SLs](#) approved local area baselines or thresholds. If they do not, remedial action must take place to mitigate them below those thresholds.

Additional COCs may be found in mixing/loading/storage areas, drainage ditches, farmhouses, or any other outbuildings and should be sampled and analyzed. If smudge pots had been routinely utilized, additional sampling for Polycyclic Aromatic Hydrocarbons and/or Total Petroleum Hydrocarbons may be required.
2. DTSC recommends that all imported soil and fill material should be tested to assess any contaminants of concern meet screening levels as outlined in [DTSC's Preliminary Endangerment Assessment Guidance Manual](#). Additionally, DTSC advises referencing the [DTSC Information Advisory Clean Imported Fill Material Fact Sheet](#) if importing fill is necessary. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material are suitable for the intended land use. The soil sampling should include analysis based on the source of the fill and knowledge of prior land use. Additional information can be found by visiting [DTSC's Human and Ecological Risk Office \(HERO\) webpage](#).

DTSC would like to thank you for the opportunity to comment on the DEIR for the Town Center at Moreno Valley Specific Plan Project. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic

A-2

A-3

A-4



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

Emily Elliott, AICP
February 24, 2025
Page 3

substances. If you have any questions or would like clarification on DTSC's comments, please respond to this letter or via our [CEQA Review email](#) for additional guidance.

↑
A-4
(CONT.)
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Sincerely,

Dave Kereazis

Dave Kereazis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

cc: (via email)

Governor's Office of Land Use and Climate Innovation
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Tamara Purvis
Associate Environmental Planner
HWMP-Permitting Division – CEQA Unit
Department of Toxic Substances Control
Tamara.Purvis@dtsc.ca.gov

Scott Wiley
Associate Governmental Program Analyst
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Scott.Wiley@dtsc.ca.gov



RESPONSES TO COMMENT LETTER A:

Department of Toxic Substances Control (DTSC)

- A-1 This comment makes introductory remarks and summarizes the proposed discretionary actions associated with the Project. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- A-2 This comment indicates that contaminants of concern (COCs) may be present on land that has been used for agricultural crops or designated for agricultural land uses and that if these lands are proposed or rezoned for residential use, the Lead Agency must identify the presence and amount of the agriculturally related COCs on these properties and ensure that proper remediation activities are completed. As identified in Draft EIR Section 4.2, Agriculture, there are no existing agricultural activities on the Project site and the last known agricultural activity on the Project site occurred in the late 1960s. As identified in EIR Section 4.9, Hazards and Hazardous Materials, a Phase I and Limited Phase II Environmental Site Assessment was conducted to identify recognized environmental conditions (RECs), historical RECs (HRECs), or controlled RECs (CRECs) in connection to the Project site. The presence of undocumented soil stockpiles on site and the former agricultural use of the Project site constitute potential RECs; therefore, further investigation was completed. A Limited Phase II Investigation was completed to assess the potential for residual agricultural chemicals related to former agricultural usage at the Project site, and for certain potential compounds in the stockpiled soils. The results of the Limited Phase II Investigation are presented in Section 7.0 of the Phase I and Limited Phase II ESA included in Draft EIR Technical Appendix H. As summarized in EIR Section 4.9, soil samples were collected at 18 locations across the formerly agricultural portions of the Project site and at 10 locations in the undocumented soil stockpiles. The results of the soil sampling did not identify concentrations of Title 22 metals, organochlorine pesticides (OCPs), petroleum hydrocarbons (TPH), or PCBs at concentrations exceeding the US EPA Regional Screening Levels (RSLs) for residential land use or the California Department of Toxic Substances Control (DTSC)-Modified Screening Levels for residential land use, with the exception of arsenic. Arsenic was detected at a maximum concentration of 2.73 milligrams per kilogram (mg/kg). This concentration is well below the DTSC Human Health Risk Assessment (HHRA) Note 11 ambient arsenic screening level of 12 mg/kg. All reported arsenic concentrations are acceptable for residential property usage. Therefore, as identified in the Draft EIR, the historical agricultural use of the Project site and stockpiled soils do not represent a REC; thus, no human health risk is present, and implementation of the Project would not pose a significant hazard to the public or the environment. No further action or remediation is required. No revisions to the Draft EIR are required.
- A-3 This comment provides recommendations regarding assessment of imported soil and fill materials for COCs. As identified in Draft EIR Section 3.5, Project Construction Characteristics, the earthwork required for the Project would balance onsite and there would be no need for import of soils. Therefore, no additional COC assessment for imported soil and/or fill materials is required. No revisions to the Draft EIR are required.



- A-4 This comment provides concluding remarks. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

COMMENT LETTER B

From: Vega, Jaqueline <JaVega@RIVCO.ORG>
Sent: Thursday, February 27, 2025 9:38 AM
To: Vicente, Roxanna <RVicente@Rivco.org>
Cc: Planning Notices_DG <planningnotices@moval.org>
Subject: Re: Mail Transmittal Scan 2-26-25 PEN21-0336

Warning: External Email – Watch for Email Red Flags!

Hello,

the site is located outside the AIA, and review by the ALUC is not required.

← B-1

From: Vicente, Roxanna <RVicente@Rivco.org>
Sent: Wednesday, February 26, 2025 1:06 PM
To: Vega, Jaqueline <JaVega@RIVCO.ORG>
Cc: planningnotices@moval.org <planningnotices@moval.org>
Subject: Mail Transmittal Scan 2-26-25 PEN21-0336

Hi Jackie,

Please see the attached transmittal for your review, thank you.

Regards,

Roxanna Vicente

Executive Assistant II – TLMA ALUC



Riverside County Airport Land Use Commission
4080 Lemon Street 14th Floor
Riverside, CA 92501
(951) 955-5132
RVICENTE@RIVCO.ORG
www.rcaluc.org

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[County of Riverside California](#)



RESPONSES TO COMMENT LETTER B:

Riverside County Airport Land Use Commission (RCALUC)

- B-1 This comment states that the Project is outside the airport influence area (AIA) and review of the Project by the RCALUC is not required. This is consistent with the information included in Draft EIR Section 4.9, Hazards and Hazardous Materials, which identified that the Project site is located outside the MARB/IP AIA and therefore not subject to review by the RCALUC. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

COMMENT LETTER C



March 13, 2025

Emily Elliott, AICP
Contract Planner
City of Moreno Valley, Community Development Dept.
14177 Frederick St.
Moreno Valley, CA 92553

Subject: Town Center at Moreno Valley Specific Plan Project – Notice of Availability of Draft Environmental Impact Report (SCH No. 2022040417)

Dear Ms. Elliott:

Eastern Municipal Water District (EMWD) appreciates the opportunity to review the Notice of Availability for the Town Center at Moreno Valley Specific Plan Project Draft Environmental Impact Report.

EMWD requests that the Draft EIR identify and evaluate the Project's proposed water demands, wastewater generation/discharge, potential recycled water use, and determine if the remaining available capacity in the existing EMWD facilities can adequately serve this Project. EMWD requests the Draft EIR identify and analyze facility improvements needed for this Project if existing EMWD facilities do not have adequate capacity to serve the project or cumulative development. To help in this effort, EMWD can assist the Lead Agency/project proponent to identify EMWD's Design Conditions (DC), formerly known as the Plan of Service (POS), to determine conditions and required facilities. The Draft EIR should identify any needed District facilities as part of the Proposed Project, and evaluate impacts associated with construction/ operation of these project features.

EMWD requests the Lead Agency/project proponent contact the District early in the design process via a one-hour complementary Due Diligence meeting. This meeting will inform the Lead Agency/project proponent as to whether facility/pipeline improvements are required to service the project. To set up this meeting the Lead Agency/project proponent should complete a Project Questionnaire (form NBD-

C-1
C-2
C-3

Board of Directors
Stephen J. Corona, *President* David J. Slawson, *Vice President* Jeff Armstrong Joe Grindstaff Philip E. Paule

EASTERN MUNICIPAL WATER DISTRICT

2270 Trumble Road • Perris, CA 92572-8300
T 951.928.3777 • F 951.928.6177 • www.emwd.org



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

Ms. Elliott
March 13, 2025
Page 2

058) and submit to EMWD. To download this form or for additional information, please visit our web page www.emwd.org, then select the "Developer" link, then select the "New Development Process Forms" link. This meeting will offer the following benefits:

1. Describe EMWD's development process
2. Identify project scope and parameters
3. Provide a preliminary review of the project within the context of existing infrastructure
4. Discuss potential candidacy for recycled water service
5. Identify project submittal requirements to start the Design Conditions review

Following the Due Diligence meeting, to proceed with this project, the Design Conditions will need to be developed by the developer's engineer and reviewed/approved by EMWD prior to submitting improvement plans for Plan Check. The DC process and approval will provide the following:

1. Technical evaluation of the project's demands and existing system capacities
2. Identification of impacts to existing facilities
3. Identification of required on-site and off-site facilities, necessary to serve the project
4. Identification of easement requirements, if necessary
5. Identification of potential EMWD's cost participation in facility oversizing, if applicable

If you have questions or concerns, please do not hesitate to contact Maroun El-Hage at (951) 928-3777, extension 4468 or by e-mail at El-hagem@emwd.org.

Sincerely,

Anthony Budicin
Director of Environmental and Regulatory Compliance

Cc: Maroun El-Hage, MPA, MS, PE, EMWD Principal Civil Engineer, Dev. Services Dept.
Jose Ruiz, EMWD Assistant Engineer, Dev. Services Dept.
Martha Vilchis, EMWD Water Resources Specialist Assistant, ERC Dept.

EASTERN MUNICIPAL WATER DISTRICT - CELEBRATING 75 YEARS OF SERVICE

C-3
(CONT.)

C-4



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

Ms. Elliott
March 13, 2025
Page 3

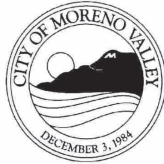
Attachment: Copy of Public Notice

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EASTERN MUNICIPAL WATER DISTRICT - CELEBRATING 75 YEARS OF SERVICE



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report



RECEIVED FEB 24 2025

Community Development Department
Planning Division
14177 Frederick Street
P. O. Box 88005
Moreno Valley CA 92552-0805
Telephone: 951.413-3206
FAX: 951.413-3210

**NOTICE OF AVAILABILITY
TOWN CENTER AT MORENO VALLEY SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT
PEN21-0336, PEN25-0007, PEN21-0335, PEN21-0334, and PEN22-0077.
SCH No. 2022040417**

NOTICE IS HEREBY GIVEN that, pursuant to requirements of the California Environmental Quality Act (CEQA), the City of Moreno Valley has prepared a Draft Environmental Impact Report (DEIR) for the proposed Town Center at Moreno Valley Specific Plan. The Project Site is located on the northwest corner of the intersection of Nason Street & Alessandro Boulevard in the City of Moreno Valley, Riverside County, California. The Project Site is not included on any list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5.

The Project includes the following:

Project Title: Town Center at Moreno Valley Specific Plan Project

Location: The Project Site is located on the northwest corner of the intersection of Nason Street & Alessandro Boulevard. The Project Site is located south of Cottonwood Avenue, west of Nason Street, and north of Alessandro Boulevard. The Project Site comprises Assessor Parcel Numbers 487-470-030 and 487-470-031.

Description: The Project includes the following discretionary actions under consideration by the City of Moreno Valley:

- 1) **PEN21-0336 (EIR)** Certification of the Town Center at Moreno Valley Specific Plan Project Final Environmental Impact Report.
- 2) **PEN25-0007 (General Plan Amendment)** A General Plan Amendment to change the land use designation for the Project Site from Public Facilities (P) to Residential (30 dwelling units/acre maximum), Open Space, and Commercial to allow a mixed-use development with residential, commercial, park, and civic uses.
- 3) **PEN21-0335 (Zone Change)** A Change of Zone to rezone the Project Site from Public (P) District to TCMV Specific Plan (PEN21-0335) for the TCMV Specific Plan (SP 222).
- 4) **PEN21-0334 (Specific Plan)** The Specific Plan involving a mixed-use development consisting of residential, commercial/civic, and open spaces uses. The proposed Specific Plan is designed to provide flexibility for development within the Specific Plan area and serves as the regulatory document governing the orderly growth and development of the Project site.

C-5
(CONT.)



- 5) **PEN22-0077 (Tentative Tract Map)** The Tentative Tract Map for subdivision of the Project Site into six (6) residential-use lots, one (1) commercial-use lot, two (2) open space lots, and associated dedicated areas for necessary infrastructure. The existing alignment of Bay Avenue would be vacated and existing road easements along Alessandro Boulevard, Cottonwood Avenue, and Nason Street would be dedicated to the City.

Significant Environmental Impacts:

The DEIR identified potentially significant environmental impacts to the following resources: aesthetics, air quality, biological resources, cultural resources, geology and soils (paleontological resources), greenhouse gas emissions, and tribal cultural resources. With the incorporation of mitigation measures, potentially significant impacts to aesthetics, biological resources, cultural resources, geology and soils, and tribal cultural resources would be reduced to less than significant impacts. Even with mitigation incorporated, potentially significant impacts related to air quality and greenhouse gas emissions would remain significant and unavoidable.

Cortese List Notice: Pursuant to Public Resources Code §21092.6(a), the Project Site is not included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 (California Department of Toxic Substances Control list of various hazardous sites).

Document Availability: The DEIR and its technical appendices are available for review on the City's website at (<https://moval.gov/cdd/documents/about-projects.html>) and at City Hall located at 14177 Frederick Street, Moreno Valley during normal business hours (7:30 a.m. to 5:30 p.m., Monday through Thursday and Friday, 7:30 a.m. to 4:30 p.m.).

In addition, the Draft EIR is available for review at the City's three Library Branches located at:

- Main Branch, 25480 Alessandro Boulevard
- Mall Branch, 22500 Town Circle
- Iris Plaza Branch, 16170 Perris Boulevard

45-day Public Review Period: The Public Review Period shall commence February 24, 2025, through April 10, 2025.

Submission of Written Comments: Members of the public, responsible and trustee agencies, and other interested parties may submit written comments (including emailed comments) on the DEIR during the 45-day Public Review Period. Written comments must be received at the City of Moreno Valley Community Development Department **no later than the conclusion of the 45-day review period, at 5:30 p.m. on April 10, 2025.**

Emily Elliott, AICP, Contract Planner
City of Moreno Valley, Community Development Department 14177 Frederick Street,
Moreno Valley, CA 92553
Email: planningnotices@moval.org

For additional information, please contact Emily Elliott, AICP, Contract Planner, at (951) 413-3206 or Email: planningnotices@moval.org



**RESPONSES TO COMMENT LETTER C:
Eastern Municipal Water District (EMWD)**

- C-1 This comment makes introductory remarks. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- C-2 This comment requests that the Draft EIR include an analysis of the Project's water demands, wastewater generation/discharge, and recycled water use. This comment also notes that the Draft EIR should include a determination that there is adequate capacity in the existing EMWD facilities to serve the Project; if there is not adequate capacity, the Draft EIR should identify and analyze the EMWD facility improvements necessary to provide adequate capacity. Additionally, the commenter identifies that they can assist in determining the EMWD Design Conditions and facilities that would be required.

The information requested in the comments was included the Draft EIR. Draft EIR Section 3.4.3.F, Utility Infrastructure Improvements, identifies the utility infrastructure necessary to serve the proposed development, including EMWD domestic water and sanitary sewer facilities. As explained in the Draft EIR, the Project is not a candidate for recycled water due to the lack of existing or planned reclaimed water lines in the area. As identified under the analysis of Threshold "a" in Draft EIR Section 4.18, Utilities and Service Systems, the domestic water and sewer facilities would be installed with the proposed development and would connect to the existing utility lines adjacent to the Project site, which have sufficient capacity to serve the Project. The final sizing and design of the utility infrastructure to be installed as part of the Project would occur during final design in coordination with EMWD as part of the Design Conditions process. As also identified under the analysis of Threshold "a" in Draft EIR Section 4.18, Utilities and Service Systems construction activities associated with installation of new domestic water and sewer lines and connections to existing water lines in the site-adjacent roadways would be within the physical impact area identified for the Project and evaluated throughout the Draft EIR (refer to the construction and physical impact discussions in Draft EIR Section 4.1 through Section 4.19). As identified, the installation of utility lines has the potential to cause construction-related environmental effects (e.g., short-term air pollutant emissions, noise, impacts to biological, cultural and paleontological resources, and traffic movement disruptions), which are an inherent part of the Project's construction process. As determined in the Draft EIR, there are no significant environmental impacts specifically related to installation of the proposed water lines or the proposed sewer lines. The proposed water facilities would be installed in compliance with applicable City Engineering Standards, which incorporate EMWD standards.

With respect to the Project's estimated water demands, EMWD prepared the required Water Supply Assessment (WSA) for the Project, which is included in Draft EIR Technical Appendix M and summarized in the analysis for Threshold "b" in Draft EIR Section 4.18, Utilities and Service Systems. EMWD estimated the water demands for the Project to be 279,498 gallons per day and determined that it has adequate water supplies to meet the Project's potable water



demand. Further, as identified under the analysis of Threshold “c” in Draft EIR Section 4.18, Utilities and Service Systems, the Moreno Valley Regional Water Reclamation Facility (MVRWRF) would have adequate wastewater treatment capacity for the Project.

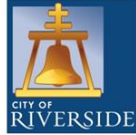
No revisions to the Draft EIR are required.

- C-3 This comment requests that the Project proponent schedule a “Due Diligence” meeting with EMWD early in the design process to discuss the proposed Project, provides a list of the benefits of the Due Diligence meeting, and describes the process following the Due Diligence meeting and leading up to the review and approval of the Project’s Design Conditions by EMWD prior to submitting plans for plan check. As requested, the Project proponent will coordinate with EMWD early in the design process. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- C-4 This comment provides concluding remarks. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- C-5 This attachment to the comment letter is a copy of the Notice of Availability (NOA) for the proposed Project received by EMWD on February 24, 2025; no response is required.



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

COMMENT LETTER D



Community & Economic Development
Department
Planning Division

City of Arts & Innovation

April 10, 2025

Emily Elliott, AICP
Contract Planner
City of Moreno Valley, Community Development Department
14177 Frederick Street
Moreno Valley, CA 92553

Subject: **City of Riverside's Review a Notice of Availability of a Draft Environmental Impact Report for the Town Center at Moreno Valley Specific Plan**

Dear Ms. Elliott:

Thank you for the opportunity to comment on the Notice of Availability (NOA) of a Draft Environmental Impact Report (DEIR) for the Town Center at Moreno Valley Specific Plan.

The City of Riverside (City) understands that the project consists of various discretionary actions intended to allow for the development of up to 800 homes; a neighborhood commercial center; a civic building; and a public park.

Given the proximity to the City of Riverside, the City would like to provide the following comments:

Public Works Department – Traffic Engineering Division:

- Appendix L1- VMT Analysis
 - Page 5 – City of Moreno Valley VMT Per Capita
 - Table 4: City of Moreno Valley VMT Per Capita
 - Please be advised that the latest WRCOG VMT Screening Tool, which is also based on the RIVCOM 4.0.1, reports that the City HB VMT per capita is 13.5 for 2019 and 13.2 for 2025.
 - Page 6 – Project Generated VMT & Project's Cumulative Effect on VMT
 - Table 6: Project Generated VMT
 - Please be advised that the latest WRCOG VMT Screening Tool, which is also based on the RIVCOM 4.0.1, reports that the TAZ HB VMT per capita is 15.3 for 2019 and 14.1 for 2025.
 - Table 7: Project Effect on VMT
 - The difference between the service population in the baseline year and horizon year, both with and without the project, is greater than the 3,080 new residents projected to be added as a result of the project. Please provide an explanation and/or correct the service population numbers.

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- Appendix L2- VMT Alternatives
 - Page 2 – Alternative 2: Reduced Development – Less Commercial
 - Table 2: Alternative 2 VMT Per Capita
 - Based on the WRCOG VMT screening tool, the TAZ PA VMT per resident is 15.3 VMT per capita. Please explain why the VMT value is lower than what the WRCOG tool reports.
 - Page 3 – Alternative 3: Reduced Development – Less Development and Less Commercial
 - Table 4: Project VMT Comparisons with WRCOG VMT Per Capita
 - Please be advised that the latest WRCOG VMT Screening Tool, which is also based on the RIVCOM 4.0.1, reports that the City threshold for HB VMT per capita is 13.2 VMT/capita.

D-4

The City appreciates your consideration of the comments provided in this letter. Should you have any questions regarding this letter, please contact me at (951) 826-5944, or by e-mail at mtaylor@riversideca.gov.

D-5

We thank you again for the opportunity to provide comments on this proposal and look forward to working with you in the future.

Sincerely,

Matthew Taylor
Principal Planner

cc: Patricia Lock Dawson, Mayor
Riverside City Council Members
Mike Futrell, City Manager
Rafael Guzman, Assistant City Manager
Jennifer A. Lilley – Community and Economic Development Director
Maribeth Tinio, City Planner
Gil Hernandez, Public Works Director
Jack Liu, Interim City Attorney

RESPONSES TO COMMENT LETTER D:

City of Riverside, Community & Economic Development Department

- D-1 This comment makes introductory remarks and briefly summarizes the Project. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- D-2 This comment addresses the Project's vehicle miles traveled (VMT) analysis included in Draft EIR Technical Appendix L1, specifically information provided in Table 4 and Table 6 of the VMT Analysis regarding City of Moreno Valley VMT Per Capita, and Project Generated VMT, respectively. The comment advises that the latest Western Riverside Council of Governments (WRCOG) VMT Screening Tool based on Riverside County Model (RIVCOM) 4.0.1 reports that the City home-based (HB) VMT per capita is 13.5 for 2019 and 13.2 for 2025, and the traffic analysis zone (TAZ) HB VMT per capita is 15.3 for 2019 and 14.1 for 2025. The VMT Screening Tool referenced in the comment was not used as the basis for the Project VMT analysis presented in the Draft EIR. The Project VMT Analysis was based on use of RIVCOM model 4.0.1, which is the appropriate tool for conducting VMT analyses. Further, the commenter does not indicate how year 2019 and 2025 VMT per capita referenced in the comment is relevant to the Project analysis. As specified in the City of Moreno Valley's adopted VMT methodology, VMT analyses and significance thresholds must be evaluated under both the Existing plus Project condition and the Horizon Year condition. The Existing plus Project scenario is defined as the year 2024, corresponding to when the VMT analysis was prepared. The Horizon Year is defined as 2045, consistent with long-range regional planning assumptions. As such, the Project analysis is methodologically sound and compliant with applicable guidance. No revisions to the VMT analysis are warranted.
- D-3 This comment requests an explanation as to why the estimated Project service population calculations between the baseline year and horizon year are greater than the 3,080 new residents projected to be added as a result of the Project. As noted in the VMT screening Step 3: Project Type Screening, included in the VMT Analysis in Draft EIR Technical Appendix L1, all of the proposed uses except the residential land use designation meet the Project Type Screening criteria and are not subject to further VMT analysis. However, in order to fully disclose any possible Project effect on cumulative VMT impacts, employment generated from the proposed non-residential uses was conservatively included in the modeling inputs to identify any potential cumulative VMT impacts. As such, the VMT analysis included a service population of 3,444, which includes the residential population identified in the comment plus employees. No revisions to the VMT analysis are required.
- D-4 This comment addresses the VMT per capita assumptions used for the VMT alternatives analysis provided in Draft EIR Technical Appendix L2. Please refer to the response to comment D-2 above, which addresses this comment. No revisions to the VMT analysis are required.
- D-5 This comment provides concluding remarks. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.



COMMENT LETTER E



Moreno Valley/Box Springs Group

To Planner Emily Elliot,

April 10, 2025

Re: Comments on the Moreno Valley Town Center (MVTC) Draft EIR and Specific Plan.

As a result of the Arabella developer being able to get his 15,000 units approved without enough onsite active parks for more than 40,000 apartment dwellers, we again have a developer doing the same thing for those of his project. The Moreno Valley Trade Center (MVTC) is expected to have 800 units on less than 35 acres which means more than 3,000 people. Based on our city's standards of 3 acres per 1,000 residents, the MVTC should be required to have more than 9 acres of parks onsite. Instead only one real 3.5 acres park is provided for those more than 3,000 people without any yard of their own. They are also offering a 1.3 acre "linear park" which is adjacent to their main internal road and will act as a wide setback next to their commercial. Like Aquabella they only offer the following:

"The proposed onsite park facilities alone do not meet the parkland standards established in the General Plan. Therefore, in compliance with the MVMC Chapter 3.40, the parkland requirement for the Project would be met through a combination of dedication of land, provision of onsite recreational facilities, and payment of in-lieu fees." (DEIR page 4.15-12).

Even with the non-functional "linear park" the acreage provided is less than half of the more than 9 acres that should be required onsite for those without any place of their own — except inside their high density unit. With 1,200 acres on the project site this should be as unacceptable to Moreno Valley Planning Commissioners and City Council members as it is to the Sierra Club.

"A prominent feature of the Downtown Center will be a new Central Park, providing pedestrian and bicycle connectivity". (MoVal General Plan page 2-16) If not on these 1,200 acres, where will we have a Central Park?

Lijin Sun's SCAQMD NOP letter had the following: "In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts"

The mitigation measures required by city planners to reduce the project's significant air quality and greenhouse (GHG) impacts as shown below from the Draft EIR or any other impacts do not have to be agreed to by the developer. They can later present their case to the city council to try and eliminate them.

"5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS

E-1

E-2

E-3



IMPLEMENTED

The California Environmental Quality Act (CEQA) Guidelines require that an environment impact report (EIR) disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines Section 15126[b]). As identified through the topical issues analysis provided in EIR Section 4.0, Environmental Analysis, the Town Center at Moreno Valley (TCMV) Specific Plan Project (Project) is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after the consideration of Project design features, compliance with applicable federal, State, and local regulations, and the application of the feasible mitigation measures identified in this EIR. The significant impacts that cannot be mitigated to a level below thresholds of significance consist of the following:

• **Air Quality**

o **Air Quality Management Plan (AQMP) Conflict.** The Project's operational-source emissions are anticipated to exceed the regional thresholds of significance for volatile organic compounds (VOC), nitrogen oxides (NOX), and carbon monoxide (CO) emissions. VOC and NOX are precursors for ozone (O3); thus, Project operational activities could contribute a substantial volume of pollutants to the South Coast Air Basin (SoCAB) that could delay the attainment of federal and State ozone standards. As such, the Project is conservatively considered to have the potential to conflict with the AQMP. Project impacts due to a conflict with the AQMP would be significant and unavoidable.

o **Cumulatively Considerable Increase in Criteria Pollutant During Operation.**

After the application of mandatory regulatory requirements and feasible mitigation measures, maximum daily emissions from Project operations would exceed the SCAQMD CEQA significance thresholds for NOx, VOC, and CO, and cannot be effectively reduced to a level below the SCAQMD thresholds of significance. Because NOx and VOC are O3 precursors, this could also result in additional violations of the State and federal O3 standards. O3 is a nonattainment pollutant. There are no additional feasible mitigation measures beyond those identified in EIR Section 4.3, Air Quality, that would reduce the Project's NOx, VOC, and CO emissions to a less than significant level. Therefore, the Project's operational air quality impacts are significant and unavoidable, and the Project would result in a cumulatively considerable net increase in a criteria pollutant for which the Project region is in non-attainment, which is a significant and unavoidable impact.

• **Greenhouse Gas Emissions.** With implementation of the identified mitigation measures in EIR Section 4.8, Greenhouse Gas Emissions, the Project's operational GHG emissions would be reduced but not to a level below the established significance threshold. Since the majority of the operational emissions are from vehicle trips and neither the Project Applicant nor the City have regulatory authority to control vehicle-source emissions, no feasible mitigation measures beyond the measures identified exist that would reduce emissions to levels that are less than significant. Therefore, the Project would result in a significant and unavoidable GHG emissions impact." (Draft EIR pages 5-1 and 5-2)

Below are some additional feasible mitigation measures, but not all that the Town Center at Moreno Valley project must be required to include to further reduce their significant impacts on air quality and greenhouse gas in our non-attainment area,

E-3
(CONT.)

E-4



— Public transit needs to be a priority. In fact this area was to have a transit center for our city. Several long turn outs/pull outs to allow buses to pull out of the flow of traffic on both Alessandro Blvd and Nason St must be required. Several large shelters that provide protection for many people from the sun and rain as well as a place to sit. They must be in a well-lit area.

— Throughout the entire project there must be recycling which includes organic waste. All units must be able to **easily** recycle that includes organic waste and this must be explained/shown in the Final EIR. All commercial, office and public uses — including parks — must provide for easy recycling which includes organic waste. All sidewalk areas inside and along its perimeter must also include recycling for different materials and organic waste containers — ideally solar compacting ones.

— Active transportation must be encouraged. This means walking where people do not face oncoming traffic without trees between them and vehicles. The project cannot be permitted to do sidewalks on the cheap by doing curbs/sidewalks in one motion. Sidewalks must be set back from the curb with vegetation/trees separating those walking from the traffic. This must be done on Alessandro Blvd as well as Nason St and on the interior of the project.

--- Bicycling must be given a priority along both Alessandro Blvd and Nason St with more than painted lines -- ideally class 1 bike paths, but at least class 2 bike lanes — and with bike lanes leading into/throughout the project site.. There must be secure bike lockers at all multi-unit buildings as well as elsewhere near units. This must also be the case at all commercial, office, parks, and public buildings.

— Electric bikes and scooters are becoming more prevalent. They need to be accommodated throughout the project site with charging at all apartments/housing/non-residential buildings as well as secure lockers. As with all of the above encouraging their use is a way to reduce your carbon footprint and reduce the pollution the project will generate.

— At least 25% of parking spaces in multi-unit buildings must be equipped with working EV chargers and each individual unit must have operational EV chargers. All parking areas throughout the project site must be equipped with at least level 2 EV chargers with signs discouraging those not needing to use them from parking in the EV space. There also need to have EV charging for vans servicing the project site. All EV chargers must remain operational for at least 25 years and replaced with the same or better as needed.

— All buildings must have maximum solar and even much of the parking areas need to be covered by solar. Ideally the non-residential would also be required to have battery storage. The solar and battery storage must be required to be in full operation for at least 25 years. With EV's charging powered by solar the vehicles would be running on sunshine.

— The portion of the building's rooftops that are not covered with solar panels, sky lights, or other essential utilities must be required to have a solar reflective index of not less than 78. This material must be required to be the minimum solar reflective rating of the roof material for the life of the buildings.

<https://www.deansteelbuildings.com/products/panels/sr-sri-by-color/>

— Concrete flatwork and parking lots must be required to have a reflectance of at least 29 and maintained for the life of the project.

E-4
(CONT.)



— All lighting is ideally powered by solar. After 10 pm outside lighting needs to be dimmed to 30% after 10 minutes unless motion is detected. This also needs to be done within all non-residential buildings.

— Large trees along both streets between sidewalk and traffic as explained above. The following link has a 2025 report in which USC "Researchers found that vegetation in a section of central L.A. offsets a surprising 60% of fossil fuel emissions (CO₂), particularly during the growing season."
<https://dornsife.usc.edu/stories/l-a-s-urban-trees-absorb-more-carbon-than-expected-usc-dornsife-study-finds-2/>

The project needs to eliminate small ornamental trees that are only good for visibility and include those that will produce significant shade and also reduce the project's carbon footprint. They must also not be allowed to trim them to produce more visibility and must replace them immediately with a similar tree if they die.

— Ceiling Fans must be required to be in as many rooms as possible to reduce the use of air-conditioning. This must happen in all residential as well as all non-residential buildings. The following is from US Department of Energy: "Energy Savings: Using a ceiling fan allows you to raise the thermostat setting by about 4°F without reducing comfort. In moderate climates, ceiling fans can sometimes replace air conditioning altogether." and can be found in this link
<https://www.energy.gov/energysaver/fans-cooling>

— No natural gas or propane in any residential units as will be the case in the 15,000 unit Aquabella project approved a few month ago. Doing so would not only reduce pollution, but help reduce health impact especially to children as mentioned in a 2023 Scientific American article as follows: "Most recently, a study published last December found that [12.7 percent of childhood asthma cases](#) in the U.S. can be attributed to gas stove use." According to the previous link in California 20.1 % is "the proportion of childhood asthma that could be theoretically prevented if gas stove use was not present" The same article in the following link warned of methane being released from gas stoves "where it traps heat and contributes to climate change."
<https://www.scientificamerican.com/article/the-health-risks-of-gas-stoves-explained/> In all non-residential building every HVAC and water heaters must be require to be electric which will reduce pollutions.

—All Landscaping and maintenance crews must in their contracts be required to use only electric equipment or other ZE equivalent at the project site for the life of the project.

—Only Tier 4 Construction Equipment or better must be required. All 50-horsepower or greater diesel-powered construction equipment must be at least Tier 4.

—- Construction contractors must be required to ensure that all nonessential idling of construction equipment is restricted to 5 minutes (total) or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.

--- During construction electrical hook-ups to the power grid must be required to be provided to encourage the use of electric construction tools such as saws, drills, and compressors. Those electric tools should be required by the city.

E-4
(CONT.)



---All off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during project construction must be required to be powered by battery or electric (plugged in) power.

---Each phase of the project must be required to provide meal options on-site on a regular basis, such as scheduling food trucks to service the buildings, or providing shuttles between the facility and nearby meal destinations, to reduce the need for employee vehicle trips to off-site locations.

— All heavy-duty haul trucks must be required to meet CARB's lowest optional low-oxides of nitrogen (Nox) standard or minimally shall be required to meet CARB's 2020 low-oxides of nitrogen (Nox) standard.

— Ideally all, but at least some buildings must be required to be built to the current v4 Leadership in Energy and Environmental Design (LEED) Silver standards. Verification of LEED equivalency must be required to be in the form of the USGBC LEED checklist prepared by an Accredited LEED professional

The recommendations found above are only a sample of feasible mitigation measures that the Sierra Club expects to see required in the Final EIR to reduce what the project's own documents read are its Significant Environmental Effects on Air Quality and Greenhouse Gas.

There are cities and counties that require buildings to be built to reduce bird strikes that cause the death of tens of thousands of birds every year. The San Jacinto Wildlife Area (SJWA) is a world class birding area. It is always listed in the top 2% for all of North of America for diversity of bird species or inland areas. The Audubon Christmas bird count usually identifies 140 to 155 species for this area. The 10,000 acre SJWA and adjoining 9,000 acre Lake Perris is home to 25 species of Raptors which includes 5 species of owls. This project being so close to these special areas should make it easy to understand the importance of adapting some these measures during design/construction of these multi-story buildings. Examples of some such special building techniques can be found in the following links, but there are others which I hope you will use:

<https://www.audubon.org/our-work/cities-and-towns/bird-friendly-buildings>

Bird-Friendly Buildings | Audubon

<https://birdallianceoregon.org/our-work/protect/habitat-and-wildlife/urban/reducing-wildlife-hazards/bird-safe-building/bird-safe-building-design-toolkit/>

Links to products for Bird-Safe Building Design Toolkit - Bird Alliance of Oregon

<https://www.cannondesign.com/perspectives/bird-friendly-building-design>

Energy Saving and Bird-friendly building design | CannonDesign

Many, but not all, of the suggestions focus on windows and lighting. Each multistory building can be made safe for the many special birds in our area. The Audubon Society supports rooftop solar and therefore maximizing the project's solar is not a problem. The Sierra Club expects to read how this project will protect the SJWA resources which is a major benefit to our city. **Without the special designs to prevent bird strikes/deaths this project will kill 1,000's o birds during the life of the project. Designing/constructing project buildings that are bird friendly will assuredly provide points towards LEED certification.**

E-4
(CONT.)

E-5



The city's website (<https://www.moval.org/cdd/documents/about-projects.html>) with notices for this Draft EIR along with technical appendices reads as follows:

"The Project is consistent with land use and growth assumptions for the Project site included in the adopted City of Moreno Valley General Plan 2040 (General Plan), which was adopted in June 2021. The Project site has a land use designation of Downtown Center and is zoned Downtown Center (DC) District."

This misinformation as well as the documents themselves make for a very confusing read by the public which is counter to the entire purpose of CEQA. Every time "General Plan" is used in the Draft EIR it needs to have either "2021" or the one we are currently using "2006" or both in front so the public as well as agencies know which one is being referenced at the time. Ideally the Draft EIR needs to be recalculated with this correction or it will be totally inadequate as an information document for the public and agencies. The same is true for the Technical Appendices and the Final EIR.

To help you appreciate/understand this problem throughout the Draft EIR I have included only some of the places where this confusion exists with the following:

"Design Guidelines included in the TCMV Specific Plan and would not conflict with goals or policies outlined in the **General Plan** or MVMC requirements that regulate scenic quality." (DEIR page S-8)

"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. Therefore, this impact is less than significant" (DEIR page S-32).

"The Project, which includes roadway improvements, and features to encourage non-vehicular travel and use of transit, would not conflict with a program, plan, ordinance, and/or policy addressing the circulation system, including SCAG's Connect SoCal, the **General Plan**, and the MVMC resulting in a less than significant impact" (DEIR page S-37)

"The area immediately north of the Project site has an "R5 Residential" land use designation in the City of Moreno Valley **General Plan (General Plan)** and is zoned "Residential 5 (R5) District.""(DEIR page 2-30

"the Specific Plan zoning district allows for "flexibility in design and development requirements which will afford the opportunity to create major developments on large tracts of land which will implement the **general plan** and the planned industrial, planned residential and planned commercial designations shown on the general plan map," (DEIR page 3-7)

E-6

E-7



"Additionally, the cumulative projects would be required to adhere to established development standards addressing scenic quality as outlined in the **General Plan** and MVMC," (DEIR page 4.1-23)

"Specific Plan and would not conflict with goals or policies outlined in the **General Plan** or MVMC requirements that regulate scenic quality" (DEIR page 4.1-24)

"This cumulative impact analysis for agricultural and forest land resources considers development of the Project site in conjunction with other development projects and planned development pursuant to the City's General Plan" (DEIR page 4.2-7)

"The City does not contain any areas with General Plan land use or zoning designations for agricultural uses." (DEIR page 4.2-7)

"This cumulative impact analysis for biological resources considers development of the Project area in conjunction with other development projects in the vicinity of the Project area as well as full **General Plan** buildout in the City of Moreno Valley and other jurisdictions in the region within the boundaries of the Western Riverside County MSHCP." (DEIR page 4.4-18)

"As identified the Project would not conflict with the **General Plan** goals and policies, or the Connect SoCal goals and growth projections." (DEIR page 4.8-18)

"Where discrepancies occur between the proposed TCMV Specific Plan and the MVMC, the TCMV Specific Plan development standards would prevail. Where no regulations or guidelines are specified in the TCMV Specific Plan, the City's **General Plan** and MVMC would govern development." (DEIR page 4.11-23)

"The existing Environmental Safety section of the **General Plan** Safety Element and proposed Noise Element rely on the transportation noise criteria that are derived from standards contained in the California Office of Planning and Research (OPR) General Plan Guidelines." (DEIR page 4.13-6)

"City of Moreno Valley **General Plan** Community Noise Compatibility Matrix, Table N-1 (Exhibit 3-A of EIR Technical Appendix K)." (DEIR page 4.13-9)

"Additionally, for future development located in areas where exterior noise levels exceed the land use compatibility standards as defined in the Noise Element, site-specific interior noise analyses demonstrating compliance with the interior noise standards of Title 24 and the **General Plan** would be required" (DEIR page 4.13-21)

"Based on the **General Plan** land use compatibility guidelines as shown on Exhibit 3-A of EIR Technical Appendix K. For conditionally acceptable land use, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design." (DEIR page 4.13-23)

"intended to recover for each new residential, commercial, and industrial development, its reasonable share, of the cost of each type of public facility and infrastructure improvements needed to serve that development and to ensure implementation of, and consistency with the City's **General Plan** and to protect the public health, safety, and welfare by ensuring that adequate public facilities and related improvements will be

E-7
(CONT.)



constructed and made available to serve new residential development concurrent with the need." (DEIR page 4.15-7)

"The amount of land required to be dedicated to the City for parks and recreation facilities is to be consistent with the standards and policies for park facilities adopted in the **General Plan** or an applicable specific plan. As identified above, the City has established a standard of 3 acres per 1,000 residents." (DEIR page 4.15-8)

"Landscape and Water Efficiency Requirements, provides landscape development requirements consistent with the goals and policies of the General Plan, and implements landscape-related **General Plan** objectives and compliance with California Model Water Efficiency Ordinance." (DEIR page 4.18-11)

"The **General Plan** and Moreno Valley zoning ordinance anticipate development of the Project site. Implementation of the Project would commit the Project site to a mixed-use development consisting of residential, commercial/civic, and park uses." (DEIR page 5-3)

"The Project and its environmental effects would not compel or commit surrounding properties to land uses other than those that are existing today or those that are planned by the City's **General Plan** and zoning ordinance. For this reason, the Project would not result in a significant, irreversible change to nearby, off-site properties" (DEIR page 5-3)

"However, this type of growth is already anticipated in the City's **General Plan**, and as identified on Figure 4.0-1, Cumulative Projects Location Map, is already being proposed. Therefore, implementation of residential and nonresidential uses allowed by the proposed TCMV Specific Plan would support existing uses in the area, and could encourage or facilitate the growth envisioned in the General Plan." (DEIR page 5-6)

"Accordingly, the Project's potential influence on other nearby properties to redevelop at greater intensities and/or different uses than the City's **General Plan** and zoning ordinance allow is speculative." (DEIR page 5-6)

"As with the Project, the Reduced Development – Less Residential Alternative would comply with City requirements and would not conflict with **General Plan** policies related to transportation and circulation, including the construction of adjacent roadways and access improvements necessary to serve the Project, and the construction of improvements to encourage pedestrian and bicycle travel, and transit use" (DEIR page 6-19)

"As with the Project, the Reduced Development – Less Commercial Alternative would comply with City requirements and would not conflict with **General Plan** policies related to transportation and circulation, including construction of adjacent roadways and access improvements necessary to serve the Project, and construction of improvements to encourage pedestrian and bicycle travel, and transit use." (DEIR page 6-28)

"As with the Project, this Alternative would have less than significant impacts related to impacts on a scenic vista, and conflict with goals or policies outlined in the **General Plan** or MVMC requirements that regulate scenic quality, and no impact related to degrading scenic resources within a State Scenic Highway." (DEIR page 6-31)

E-7
(CONT.)



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

The above are only some of the confusing uses of “General Plan” throughout the Draft EIR. The public as well as the agencies deserve better. Just because the Draft EIR correctly identifies which General Plan in other places doesn’t excuse the confusion in many important areas.

E-7
(CONT.)

In several places in the Draft EIR the following thought is expressed:

“However, if the City readopts the 2040 General Plan and Zoning Update, the areas east and south of the Project site and the area west of the southern portion of the Project site would be zoned “Downtown Center (DC) District.” (DEIR page 4.11-9’)

Throughout the Draft EIR it is very evident the developer is planning on the city to “readopt the 2040 General Plan and Zoning Updates”. Since that is expressed throughout the Draft EIR, the project must be required to meet the standards expressed in those documents for the town center. It was what was in the 2040 General Plan that the residents expected when they approved of the idea of a Town Center on these 1,200 acres. Failing to respond to those areas we provide below as part of the MoVal 2040 General Plan will make approval of this project under a readopted 2040 General Plan invalid because the Final EIR will be inadequate.

E-8

During the 2021 General Plan Update (GPU) process the idea of a downtown center was supported by most Moreno Valley residents because of what is written below about it from those documents — beginning with **DOWNTOWN CENTER**. The Draft EIR needed to reflect that which is written below — especially on lands which are mainly under the “control” by the city.

If a new Central Park is not put in this location’s 1,200 acres, what private land owner is going to put on their lands instead of structures? It is like bait and switch because we were told there was going to be a central park and these 1,200 acres are probably the last place one could be located. With the 1,600 units at the Moreno Valley mall and the 15,000 units at the nearby Aquabella project the city can reduce the number of units on this project to 300 and replace them with park acres. This was an alternative that was not discussed and needs to be in the Final EIR. Maybe the Aquabella developer would help pay for those park acres that his more than 40,000 nearby residents will need.

E-9

Many school age children will be living on this project site and other lands within the 1,200 acres designated as Downtown Center lands. Many of the nearby roads will attract major traffic. The Final EIR must explain and show where and how the best safe crossings are available for these students. The same must be done for the safest bike paths for students going to/from schools.

E-10

The Draft EIR failed to show which street within/adjacent/leading to this site will be developed as Complete Streets (<https://smartgrowthamerica.org/what-are-complete-streets/>). The Final EIR must show this or explain why complete streets are not part of this project for both Nason St and Alessandro Blvd.

E-11

The Draft EIR failed to show how it will do the following: “Create a layered network of roadways with segments assigned for different travel modes in order to provide for both roadway safety and efficient traffic flow” as explained in MoVal 2040 General Plan.

Where will the city “Provide a transit center to serve as a hub connecting destinations within Moreno Valley and the surrounding region with modern transit options such as on-demand service or micro-transit that are appropriate for the Moreno Valley context” as written below if not on these lands or

E-12



any of the Downtown Center's proposed 1,200 acres? Another bait and switch? This site must include very friendly transit/bus stops for people to be able sit out of the elements/sun/rain and where buses can pull out of the flow of traffic. This must be required of the project on **both sides** of Nason St and Alessandro Blvd.

E-12
(CONT.)

The buildings need to be LEED certified. The Final EIR needs to show that maximum solar, waterless hardware and only electric buildings with no gas are required. Recycling inside and outside of all buildings using solar trash and recycling compactors outside as seen in the following link (<https://bigbelly.com/>). In addition to multi-family units commercial buildings must also have living units on top floors. Such practices as using graywater, natural drainage systems and pervious paving to recharge aquifers are becoming more common. Landscaping with native plants and drought-tolerant plants is a must. Tree canopies that are not trimmed/pruned for visibility, but allowed to grow to full height/width to provide foliage cover/shade for people is important for Town Centers and also for reducing climate disruption/climate change. Palm trees do not provide help in any of these areas and should not be used. "Sustainability requires having a flexible approach and thinking in the long term. Sustainability is the glue that binds financing, planning, zoning, designing, marketing, and building and creates quality of life and a sense of community. Planning for sustainability does not stop at buildout." (Page 33 of "Ten Principles of Developing a Successful Town Center" (http://uli.org/wp-content/uploads/ULI-Documents/TP_TownCenters.ashx .pdf by the Urban Land Institute-ULI) This entire ULI document is incorporated into these comments by reference. The Draft EIR failed to show that most of the excellent suggestions by the ULI have been included, realized and made part of this project. Therefore please read this excellent ULI document and make the necessary modifications in the Final EIR to incorporate many more of their ideas like those found below.

E-13

"Designing a great sidewalk requires consideration of five points:

- Sidewalks need to be activated by being next to occupied retail space, residential stoops, and well-maintained lobbies for office and other compatible uses.
- Sidewalks need to be occupied, with people always there throughout the day and evening.
- Sidewalks need to be well maintained and free of litter. Having an involved community presence is important in this respect.
- Sidewalks need to impart a sense of permanence. They should be lined by mature trees, high-quality landscaping, and high-quality materials.
- Sidewalks need to be retail-friendly, safe, secure, and comfortable. These characteristics are achieved by making streets easy to cross (with on-street parking) and by providing inventive signage and few sidewalk distractions. " (ULI page 27)

What will be the set of covenants, conditions and restrictions (CC&Rs) and who will enforce them? Most Town Centers operate 24 hours a day and its design must be such that implementing the CC&Rs are easy on all concerned — including the police and fire departments which are not be added to with the building of this project. Does the nearest Fire Station have vehicles with the ladders that will reach to the top of their proposed buildings? If not, then this project needs to significantly contribute to those vehicles being at the closest Fire Station and even the modification of the building if needed.

E-14

Alessandro Blvd is a city designated truck route. The World Logistic Center (WLC) will eventually have more than 11,000 Daily diesel truck trips with many coming from the west and using roads like Alessandro Blvd and/or Cactus Ave. The projects Draft EIR must analyze the impacts on the health of those who live along these routes and the impact of toxic diesel pollution on those who want to

E-15



sit/work outside or inside at this Town Center. The impact of noise from these diesel big rigs must also be studied, analyzed as to how it will impact the outside activities of people on this site. This has not been done and we expect to see it in the Final EIR or it will be inadequate. Protecting the Health, Safety and Welfare of Moreno Valley residents must be a priority of each project approved.

The alternatives failed to include an environmentally/sustainability superior model — other than the no project alternative and less residents. The superior environmental/sustainability alternative must be proactive in including that which will make it a sustainable project long after being built and not just a smaller project.

It is sad that the MVTC project submitted will not be the environmentally/sustainability superior model.

The project needs to include the following:

- Reduce contribution to global climate change during construction and operation
- Enhance individual human health as written in our General Plan
- Protect and restore water resources which includes ground water
- Protect and enhance biodiversity and ecosystem services through the native plants used
- Promote sustainable and regenerative material cycles
- Enhance community quality of life at a minimum as written in our General Plan

"DOWNTOWN CENTER

Fostering a downtown destination with a full range of choices for shopping, dining, doing business, and having fun is an important objective for Moreno Valley, strongly supported in the community. Although activity centers are distributed throughout the city today, there is no distinct downtown core. However, a large area around the prominent cross-roads of Nason and Alessandro presents a prime opportunity to foster a Downtown Center for the city and the region. Encompassing approximately 1,200 acres near the geographic center of the community, the Downtown Center area features two regional medical facilities — the Riverside University Health System and the Kaiser Permanente Medical Center — direct access to SR-60 and I-215, and the impressive backdrop of the Bernasconi Hills to the southeast. Moreno Valley College is located a short distance to the south. Approximately 80 percent of the land is vacant and undeveloped today, including the 730-acre Aquabella Specific Plan area and a 56-acre parcel at the northwest corner of Nason and Alessandro where the Town Center Project is proposed.

The Downtown Center is envisioned as the primary hub and focal point of Moreno Valley and an economic and cultural engine in the region. With a range of activities day and night, this thriving area will draw people and businesses to Moreno Valley and will showcase the highest quality architecture/design to rival anything in the region. The Downtown Center will integrate the existing hospital complexes and provide visual and physical connections to Moreno Valley College, Lake Perris, and other key destinations within the community. Nason Street is envisioned as a grand boulevard and central spine of the Downtown Center, with the highest intensity of development focused along it. A walkable new "main street" is envisioned at the core, lined with shops, restaurants, workplaces, and cultural venues. Density and intensity will reduce gradually outward from the core to transition to the surrounding neighborhoods. New development will be organized around an interconnected grid of streets within the Downtown Center to break up the super blocks and provide convenient, safe bicycle and pedestrian linkages within the area. A prominent feature of

E-15
(CONT.)

E-16

E-17



the Downtown Center will be a new Central Park, providing pedestrian and bicycle connectivity to the hospitals and residential areas and designed with family-friendly amenities and programmed with regular festivals and events. Recognizing recreation and entertainment as key contributors to the vitality of the Downtown Center, the area is envisioned to host a performing arts venue and sports and recreation facilities". (2-16 I MoVal 2040 General Plan.

Visibility is a critical design consideration for the Downtown Center. Design standards for development at the core of the Downtown Center seek to take advantage of the relatively flat terrain and promote higher building heights to help build visual connections from other locations within the community and enhance the prominence of the Downtown Center as an important destination. A marquee building, like a clock tower, is envisioned to serve as an identifiable downtown landmark visible from anywhere in the city. Additionally, public plazas and other vantage points within the Downtown Center **should be designed to allow for view of the scenic hills surrounding the city, enhancing sense of place.**

Full realization of the Downtown Center will take many years. The Plan lays out a flexible framework to guide the evolution of the area, including principles for land use and urban design, circulation, and **parks and open space**. As individual projects are proposed in the area, **proponents will be required to develop an area plan demonstrating consistency with these principles and the buildout projections for the area analyzed in the 2040 General Plan Environmental Impact Report**. The Plan envisions the integration of the Aquabella Specific Plan area into the Downtown Center, allowing for development of supportive medical facilities, a hotel, and shops and services oriented to patients and their families adjacent to the hospitals, while also permitting development of the low-to-mid density development consistent with the underlying zoning for the Specific Plan Area. (Land Use and Community Character I 2-17)



E-17
(CONT.)



E-17
(CONT.)

Create a Downtown Center with a vibrant mix of uses that will serve as the primary hub and focal point of Moreno Valley economic and cultural engine in the region.

Require that proposed projects in the Downtown Center prepare an area plan demonstrating consistency with the principles outlined in Table LCC-2 and the illustrative development program shown in Table LCC-3 prior to approval. Development on smaller parcels may satisfy this requirement with a site plan.

Within the Downtown Center, ensure the high intensity of development is concentrated so as to create a central core with a mix of uses to activate it throughout the day and evening and to promote strong connectivity between new uses and RUMC, Aquabella, and the Kaiser hospital campus.

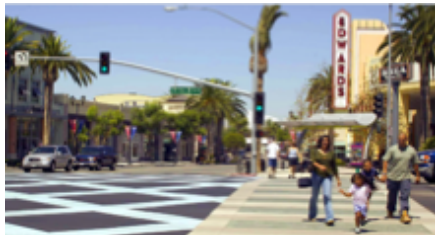
Leverage the presence of the hospitals and large tracts of vacant land to attract new higher-wage employers to the Downtown Center.

E-18

E-19

E-20

E-21



E-22



E-22
(CONT.)

LCC 2-6 Create a Central Park facility to serve as a defining feature of the Downtown Center. (MoVal 2040 General Plan 2040 page 2-18) If not on these 1,200 acres, then where? You show these images of the Town Center to the residents and then do not deliver — bait and switch. .

E-23

LCC 2-8 Transform Nason Street and Alessandro Boulevard into grand boulevards with a distinctive, inviting character that announces arrival in Downtown Moreno Valley.

E-24

LCC 2-10 Create an attractive, safe environment for bicycles and pedestrians that promotes “micro-mobility” and connectivity within the Downtown Center as well as encourage electric and autonomous vehicles.

E-25

"Preserve **views of the hills** to the southeast from within the Downtown Center and incorporate the natural topography into site development plans to help create a distinctive sense of place." (MoVal 2040 page 2-19) The MVTC has not shown they have accomplished this and the Final EIR must show it will be accomplished.

E-26

(Land Use and Community Character | 2-19)

"Table LCC-2: Downtown Center Development Principles: Circulation"

- ◆ Extend Brodiaea through the Cactus/ Alessandro superblock to serve as the “**Main Street**” with two central traffic circles and a walkable, pedestrian-oriented streetscape.
- ◆ Create a layered network of roadways with segments assigned for different travel modes in order to provide for both roadway safety and efficient traffic flow.
- ◆ Create smaller urban blocks to promote walk- ability. Block sizes should range between 330 and 660 linear feet. Blocks over 500 feet should feature mid-block connections such as **pedestrian pathways or alleys**.
- ◆ **Provide a transit center to serve as a hub** connecting destinations within Moreno Valley and the surrounding region with modern transit options such as on-demand service or micro-transit that are appropriate for the Moreno Valley context.

E-27

E-28

E-29

E-30



◆ Provide a grid of interconnecting streets with designated bicycle and pedestrian routes lined with sidewalks and furnished with pedestrian amenities throughout the area. Grade separated connections across arterial roadways should also be considered. Mid-block connections created as new developments are built will provide additional pedestrian and bicycle paths.

E-31

◆ Accommodate and encourage **electric and autonomous vehicles** with appropriate design and infrastructure.

E-32

◆ Provide distinctive connections between destinations within the Downtown Center (ex: RUMC, Aquabella, and the Kaiser hospital campus), using curvilinear roads, generous pedestrian paseos, **branded wayfinding, signage** and other design techniques that contribute to a unique sense of place.

E-33

◆ Design the interconnecting streets that break up the superblocks with reduced street widths, street parking, consistent trees and landscaping to control traffic speed and create a more intimate feel and comfort through shading.

E-34

◆ Connect the Downtown Center to the **city, state, and regional trail network** with connections via Cactus, John F. Kennedy, and Iris."

E-35

(Page 2-20 | MoVal 2040 General Plan)

The MVTC Draft EIR not only doesn't provide the above circulation elements found in the MpVal 2040 General Plan for our downtown center, but makes each of them much more difficult to achieve. The Sierra Club hopes the Final EIR will explain how the MVTC with its 1,200 acres being the largest remaining undeveloped land mass will accomplish what is written above of about the 2040 MoVal vision or the town center.

E-36

Table LCC-2: Downtown Center Development Principles: Parks and Open Space

- ◆ Provide a **linear Central Park** feature that serves as both a focal point and gathering place for surrounding neighborhoods and the city as a whole.
- ◆ Connect the RUMC and the Nason/Alessandro Town Center development with a **pedestrian paseo**, lined with ground floor uses and featuring seating, landscaping, trees, and public art to create an active public space. Provide pedestrian paseos to connect new developments with each other and with the Kaiser hospital campus.

E-37

E-38

◆ Create a **network of public outdoor spaces** including neighborhood and community parks, so that all residents of the Downtown Center are within a half-mile walk of outdoor recreational space.

E-39

◆ Promote a variety of **plazas, pocket parks**, and other common outdoor spaces in commercial and employment areas. These are envisioned as privately-owned, publicly accessible spaces.

E-40

◆ Locate neighborhood **parks and open spaces** along designated **bicycle and pedestrian routes**.

E-41



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E-42
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(Land Use and Community Character | 2-21)

The Specific Plan and Final EIR for this project should be part of the larger project envisioned above and not just a stand-alone project. This project must plan for human connectivity between it and lands south of Alessandro Blvd with its future development as part of the Downtown Center envisioned above. We look forward to reading the Specific Plan and Final EIR to see how this will be accomplished and made a reality with this project because the current proposal bears little resemblance to the vision in the MoVal 2040. The pictures used above come from the Town Center section of the MoVal 2040 General Plan and were used to gain the support of the public. The Sierra Club hopes the Final EIR will actually incorporate many of the ideas from the Downtown Center vision in the MoVal General Plan that allowed Moreno Valley residents to support it.

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E-43
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It appears the city must redo their vision of the Moreno Valley Town Center that they sold to the public as part of the MoVal 2040 General Plan. This will be especially true if the MVTC is approved like the Aquabella project. These two projects represent almost 2,000 acres of what was to be our Town Center **with a Central Park and Transit Center.**

Please keep the Sierra Club & myself informed of all documents and meetings related to this project.

↩ E-44

Sincerely,

George Hague
Sierra Club
Moreno Valley/Box Springs Group
Conservation Co-Chair

1325 P.O. Box 1325
Moreno Valley, CA 92556



**RESPONSES TO COMMENT LETTER E:
Sierra Club, Moreno Valley/Box Springs Group (Letter)**

- E-1 This comment suggests that the parkland to be provided as part of the currently proposed Town Center at Moreno Valley (TCMV) Specific Plan Project (Project) is not sufficient. This comment also incorrectly identifies the Project as the Moreno Valley Trade Center. The Moreno Valley Trade Center is a previously proposed non-residential project in the City that has no relationship to the proposed TCMV Specific Plan Project. The comment also refers to the Aquabella project, which is a mixed-use residential community project in the City that is separate from the TCMV Specific Plan Project.

Further, this comment erroneously indicates that the Project site encompasses 1,200 acres. As described throughout the Draft EIR, and specifically in Section 3.0, Project Description, the Project site encompasses approximately 69.6-gross-acres in the central portion of the City of Moreno Valley, and is bound by Cottonwood Avenue to the north, Nason Street to the east, Alessandro Boulevard to the south, and vacant land planned for development and a residential subdivision to the west. The referenced 1,200-acre area is the approximate area designated as “Downtown Center” in the previously adopted Moreno Valley General Plan 2040 Update (referred to herein as the “2040 General Plan”), which was adopted by the City in June 2021 and the City is in the process of readopting following litigation. As further described in Draft EIR Section 3.1, Project Background, the approval of the 2040 General Plan has been set aside by the City based on a June 2024 court ruling¹. The Project site represents only a small portion (approximately 5.8%) of the identified Downtown Center area. The Project does not, and is not required to, implement all of the anticipated components of the Downtown Center area as envisioned by the City in the 2040 General Plan.

With respect to the parkland provided by the Project, the commenter is correct that based on the City’s established parkland ratio of 3.0 acres per 1,000 residents, the Project would generate a demand for approximately 9.2 acres of parkland. However, the commenter incorrectly asserts that (1) this parkland should be provided onsite, and (2) that the Project is only providing 4.8 acres of parkland on a 1,200-acre site (as noted above, the Project site is actually 69.6 acres). With respect to the provision of on-site parkland, and as described in Draft EIR Section 4.15, Public Services and Recreation (refer to the analysis provided under Thresholds “a” and “b”), in compliance with the Moreno Valley Municipal Code (MVMC) Chapter 3.40, the parkland requirement for the Project would be met through a combination of dedication of land, provision of onsite recreational facilities, and payment of in-lieu fees. The provision of on-site private open space and recreational facilities may be credited against the parkland dedication and/or fee requirement at the discretion of the City. Until the on-site facilities are further defined and considered in the context of public outdoor spaces, the calculation of the “credit” for parkland cannot, and is not required to be made. Additionally, in compliance with MVMC Chapter 3.38, the Project Applicant would also pay the required Development Impact Fees (DIF) for residential uses, which are collected for the purposes of acquiring, designing, constructing, improving, providing, and maintaining, to the extent permitted by law, park

¹ A lawsuit entitled *Sierra Club v. The City of Moreno Valley*, Riverside Superior Court Case No. CVRI2103300, challenged the validity of the 2040 General Plan, the Climate Action Plan, and the EIR. In June 2024, the City Council set aside the 2021 approvals and certification based on a May 2024 ruling and judgment of the court.



improvements and recreation/community center facilities as provided for in the City's adopted General Plan and CIP, or an adopted Master Plan of Parks and Recreation Facilities.

With respect to the amount of parkland provided, the 4.9 acres reserved for open space as part of the proposed TCMV Specific Plan represents approximately 7% of the total Project site.

As discussed above, the Project site is not 1,200 acres, and it is not appropriate to consider the amount of parkland provided in comparison to the entire 1,200-acre Downtown Center area. Further, the proposed open space/park is not intended by the City to be the "Central Park" anticipated in the Downtown Center referenced in this comment, which is envisioned by the City to "host a performing arts venue and sports and recreation facilities" (refer to 2040 General Plan page 2-16). Rather, the Project site is located along Nason Street, envisioned as a "grand boulevard and central spine of the Downtown Center, with the highest intensity of development focused along it" (refer to 2040 General Plan page 2-16). Density and intensity are intended to reduce gradually outward from the core to transition to the surrounding neighborhoods. Consistent with this vision, the proposed TCMV Specific Plan includes residential and commercial uses, and the proposed park would be a community amenity that would provide passive and recreational opportunities for the community. No revisions to the Draft EIR analysis are required.

- E-2 This comment refers to the comment letter provided by the South Coast Air Quality Management District in response to the Notice of Preparation for the TCMV Specific Plan Draft EIR, which addressed the requirement to identify mitigation measures for significant air quality impacts. The letter was included in Appendix A to the Draft EIR, and, as discussed in the Draft EIR, all relevant comments received in response to the NOP are addressed in the Draft EIR. As identified in Table 1-1, Summary of NOP Comments, in Section 1.0, Introduction, of the Draft EIR, the SCAQMD's NOP comments are addressed in Sections 3.0, 4.1, and 4.8 of the Draft EIR. This comment also incorrectly asserts that the mitigation measures identified in the Draft EIR do not have to be agreed to by the developer. The mitigation measures identified in the Draft EIR are included in the Project's Mitigation Monitoring and Reporting Program (MMRP), which is presented in Section 4.0 of this document. The City is responsible for ensuring that each of the identified mitigation measures is implemented. The MMRP provides for monitoring, implementation, and enforcement of all mitigation measures.
- E-3 This comment excerpts the summary of Project's significant and unavoidable air quality and greenhouse gas (GHG) emissions impacts resulting from the Project, which are presented in Draft EIR Section 5.1. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-4 This comment provides a list of additional mitigation measures for the City to consider to further reduce the Project's significant air quality and GHG emissions impacts. The commenter does not provide any substantial evidence regarding the feasibility of these suggestions and does not provide any evidence to indicate to what level of emissions reduction and air quality improvement, if any, the suggested mitigation measures would achieve.



With respect to mitigation measures for construction-related emissions, as identified in Draft EIR Section 4.3, Air Quality, the Project's construction-related emissions were determined to be less than significant with the implementation of Draft EIR MM 4.3-1, which sets forth measures to reduce air pollutant emissions during construction activities, including the use of Tier 4 Final construction equipment and limiting idling of construction equipment as suggested by the commenter. Therefore, no additional mitigation measures for construction-related emissions are required.

Although CEQA does not require the lead agency to analyze a list of every imaginable mitigation measure, the feasibility and practicality of each suggested mitigation measure for operational emissions provided by the commenter is presented in the table below. The table also identifies which of commenter's suggestions are duplicative of mandatory regulatory requirements or of mitigation measures already set forth in the Draft EIR. The table is followed by revised Draft EIR MM 4.8-1 and MM 4.8-2, which include additional measures that the City is requiring to reduce the Project's air quality and GHG emissions. These mitigation measures are also included in Section 3.0, Draft EIR Clarifications and Revisions, and Section 4.0, Mitigation Monitoring and Reporting Program, of this document.

Commenter Suggestions	Response
Public transit needs to be a priority. In fact this area was to have a transit center for our city. Several long turn outs/pull outs to allow buses to pull out of the flow of traffic on both Alessandro Blvd and Nason St must be required. Several large shelters that provide protection for many people from the sun and rain as well as a place to sit. They must be in a well-lit area.	As further discussed in response to comment E-12, the previously adopted 2040 General Plan did not anticipate implementation of the Downtown Center transit center at the Project site. However, as described in Draft EIR Section 3.0, Project Description, there are bus stops on Nason Street (at Cottonwood Avenue and Alessandro Boulevard) as well as a stop on Alessandro Boulevard (toward the southwestern corner of the Specific Plan area). Based on coordination with the Riverside Transit Agency (RTA) conducted by the City and the Project Applicant during preparation of the proposed TCMV Specific Plan, potential new bus routes and bus stops may be implemented within the Specific Plan area with the specific locations to be determined in coordination with RTA during the processing of site development plans. The specific design and placement of bus stop locations would also be reviewed with the site development plan submittal. This is not a mitigation measure and is already included as part of the Project.
Throughout the entire project there must be recycling which includes organic waste. All units must be able to easily recycle that includes organic waste and this must be explained/shown in the Final EIR. All commercial, office and public uses — including parks — must provide for easy recycling which includes organic waste. All sidewalk areas inside and along its permitter must also include recycling for different materials and organic waste containers — ideally solar compacting ones.	As described in Draft EIR Section 4.18, Utilities and Service Systems, the Project would comply with state-mandated organic waste recycling (Senate Bill 1383), and local waste ordinances and incorporate recycling, including organic waste diversion, subject to City municipal code requirements and programs. This is not a mitigation measure as this is a regulatory requirement.
Active transportation must be encouraged. This means walking where people do not face oncoming traffic	As discussed in the 2006 General Plan policy consistency analysis provided in Draft EIR Section 4.11, Land Use



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Commenter Suggestions	Response
without trees between them and vehicles. The project cannot be permitted to do sidewalks on the cheap by doing curbs/sidewalks in one motion. Sidewalks must be set back from the curb with vegetation/trees separating those walking from the traffic. This must be done on Alessandro Blvd as well as Nason St and on the interior of the project.	and Planning, and Section 4.16, Transportation, the Project is designed to meet the City's arterial street and street design standards regarding sidewalk locations and tree placements. This is not a mitigation measure as this is a regulatory requirement.
Bicycling must be given a priority along both Alessandro Blvd and Nason St with more than painted lines -- ideally class 1 bike paths, but at least class 2 bike lanes — and with bike lanes leading into/throughout the project site.. There must be secure bike lockers at all multi-unit buildings as will [sic] as elsewhere near units. This must also be the case at all commercial, office, parks, and public buildings.	As described in Draft EIR Section 3.0, Project Description, and Section 4.16, Transportation, bicycle lanes are included as part of the Project to allow access to various land uses, including a Class II Bike Lane along Nason Street, a proposed Class II Bike Lane along Alessandro Boulevard and a Class III Bike Route along Cottonwood Avenue. Bicycle parking facilities would be provided per City code requirements. This is not a mitigation measure as this is a regulatory requirement.
Electric bikes and scooters are becoming more prevalent. They need to be accommodated throughout the project site with charging at all apartments/housing/non-residential buildings as well as secure lockers. As with all of the above encouraging their use is a way to reduce your carbon footprint and reduce the pollution the project will generate.	Refer to revised MM 4.8-1 below, which requires that facilities to allow charging of electric bikes and scooters be accommodated in appropriate locations within the Project site, a minimum of two charging spaces shall be provided on-site.
At least 25% of parking spaces in multi-unit buildings must be equipped with working EV chargers and each individual unit must have operational EV chargers. All parking areas throughout the project site must be equipped with at least level 2 EV chargers with signs discouraging those not needing to use them from parking in the EV space. There also need to have EV charging for vans servicing the project site. All EV chargers must remain operational for at least 25 years and replaced with the same or better as needed.	Refer to revised MM 4.8-1 and MM 4.8-2 below, which include the following additional requirements: • Residential buildings will provide Level 2 EVSE with NEMA 14-50 outlets for each residential unit. • (1) 25% of the parking stalls in the Commercial/Civic Area will be made-ready for EV charging, or (2) 20% of the 25% make-ready stalls will be installed as a level 3 charger. All EV chargers installed will be appropriately maintained for use.
All buildings must have maximum solar and even much of the parking areas need to be covered by solar. Ideally the non-residential would also be required to have battery storage. The solar and battery storage must be required to be in full operation for at least 25 years. With EV's charging powered by solar the vehicles would be running on sunshine.	Refer to revised Draft EIR MM 4.8-1 below, which requires non-residential development to use on-site renewable energy sources such as solar. Refer to revised Draft EIR MM 4.8-2 below, which requires solar installations on residential buildings to the extent practicable, subject to necessary roof penetrations, design constraints, and solar/utility provider guidelines and restrictions.
The portion of the building's rooftops that are not covered with solar panels, sky lights, or other essential utilities must me [sic] required to have a solar reflective index of not less than 78. This material must be required to be the minimum solar reflective rating of the roof material for the life of the buildings. https://www.deansteelbuildings.com/products/panels/sr-sri-by-color/	This measure is infeasible as it has the potential to adversely impact adjacent uses due to glare.



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Final Environmental Impact Report**

Commenter Suggestions	Response
Concrete flatwork and parking lots must be required to have a reflectance of at least 29 and maintained for the life of the project.	Refer to revised Draft EIR MM 4.8-1 and MM 4.8-2 below, which require that concrete sidewalks be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable.
All lighting is ideally powered by solar. After 10 pm outside lighting needs to be dimmed to 30% after 10 minutes unless motion is detected. This also needs to be done within all non-residential buildings.	Outdoor lighting will comply with the California Energy Code and Dark Sky requirements. Lighting shall be installed and sourced to meet City requirements for adequate coverage, operation, and safety considerations. This is not a mitigation measure as this is a regulatory requirement. Requiring a “solar only” lighting system is not operationally reliable to meet Project needs and city safety requirements.
Large trees along both streets between sidewalk and traffic as explained above. The following link has a 2025 report in which USC "Researchers found that vegetation in a section of central L.A. offsets a surprising 60% of fossil fuel emissions (CO2), particularly during the growing season." https://dornsife.usc.edu/stories/l-a-s-urban-trees-absorb-more-carbon-than-expected-usc-dornsifestudy-finds-2/ The project needs to eliminate small ornamental trees that are only good for visibility and include those that will produce significant shade and also reduce the project's carbon footprint. They must also not be allowed to trim them to produce more visibility and must replace them immediately with a similar tree if they die.	Tree selection will utilize City-approved Street Tree Lists and adhere to visibility and infrastructure protection requirements. Large canopy species will be used where appropriate. The Project will meet the City's adopted landscape requirements for tree plantings, species selections and required maintenance. This is not a mitigation measure as this is a regulatory requirement.
Ceiling Fans must be required to be in as many rooms as possible to reduce the use of air-conditioning. This must happen in all residential as well as all non-residential buildings. The following is from US Department of Energy: "Energy Savings: Using a ceiling fan allows you to raise the thermostat setting by about 4°F without reducing comfort. In moderate climates, ceiling fans can sometimes replace air conditioning altogether." and can be found in this link [sic] https://www.energy.gov/energysaver/fans-cooling	Refer to revised Draft EIR MM 4.8-2, which requires that residential buildings be designed to accommodate ceiling fans.
No natural gas or propane in any residential units as will be the case in the 15,000 unit Aquabella project approved a few month ago. Doing so would not only reduce pollution, but help reduce health impact especially to children as mentioned in a 2023 Scientific American article as follows: "Most recently, a study published last December found that 12.7 percent of childhood asthma cases in the U.S. can be attributed to gas stove use." According to the previous link in California 20.1 % is "the proportion of childhood asthma that could be theoretically prevented if gas stove use was not present" The same article in the following link warned of methane being released from gas stoves "where it traps heat and contributes to climate change."	Refer to revised Draft EIR MM 4.8-1 and MM 4.8-2, which require no natural gas or propane be installed in the residential units, and in all non-residential buildings, electric HVAC units with electric heat pumps will be installed.



Commenter Suggestions	Response
https://www.scientificamerican.com/article/the-health-risks-of-gas-stoves-explained/ In all nonresidential building every HVAC and water heaters must be require to be electric which will reduce pollutions.	
All Landscaping and maintenance crews must in their contracts be required to use only electric equipment or other ZE equivalent at the project site for the life of the project.	Refer to Draft EIR MM 4.3-3, which requires electrical service be provided to each of the areas in the vicinity of the buildings that are to be landscaped in order that electrical equipment may be used for landscape maintenance.
Ideally all, but at least some buildings must be required to be built to the current v4 Leadership in Energy and Environmental Design (LEED) Silver standards. Verification of LEED equivalency must be required to be in the form of the USGBC LEED checklist prepared by an Accredited LEED professional	Buildings will be designed to meet CALGreen standards related to energy efficiency; however, as discussed under response to comment E-13, there is no requirement for the buildings to be LEED designated buildings.

The following revisions to Draft EIR MM 4.8-1 and Draft EIR MM 4.8-2 (shown in bold and underlined format below) are hereby incorporated into the Project and would further reduce criteria pollutant and/or GHG emissions. However, the emissions reductions from these mitigation measures cannot be quantified and the Project's impacts would remain significant and unavoidable.

MM 4.8-1 The project applicant shall design and build future non-residential development to meet/include the following:

- The project will utilize on-site renewable energy sources such as solar, to reduce electrical demand as per Division A5.211, Renewable Energy, of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code.
- The project will incorporate measures to reduce the overall use of potable water within the building by 12% as per Division A5.3, Water Efficiency and Conservation, as outlined under Section A5.303.2.3.1 of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code.
- **The project will incorporate facilities to allow charging of electric bikes and scooters in appropriate locations within the Project site. A minimum of two charging spaces will be provided on-site.**
- **Either 25% of the parking stalls in the Commercial/Civic Area will be made-ready for EV charging, or 20% of the 25% make-ready stalls will be installed as a level 3 charger. All EV chargers installed will be appropriately maintained for use.**
- **Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable.**
- **Electric HVAC units with electric heat pumps will be installed.**



Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements.

MM 4.8-2 The project applicant shall design and build future residential development to meet/include the following:

- No wood-burning fireplaces shall be installed in any of the dwelling units.
- **No natural gas or propane will be installed in the residential units.** All buildings shall be electric, ~~to the extent feasible,~~ meaning that electricity is the primary source of energy for water heating; heating, ventilation, and air conditioning (HVAC) within the building, excluding pool heating.
- All major appliances provided/installed shall be EnergyStar-certified or of equivalent energy efficiency, where applicable.
- **Level 2 electric vehicle supply equipment (EVSE) with National Electrical Manufacturers Association (NEMA) 14-50 outlets for each residential unit.**
- **Solar installations on residential buildings to the extent practicable, considering necessary roof penetrations, design constraints, and solar/utility provider guidelines and restrictions.**
- **Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable.**
- **Residential buildings will be designed to accommodate ceiling fans.**

Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements.

E-5 This comment discusses bird species in the San Jacinto Wildlife Area (SJWA) and Lake Perris and recommends that the Project include design features to prevent bird strikes. The Project is approximately 3.1 miles from the SJWA and 3.6 miles from Lake Perris. Birds are more susceptible to collision with tall man-made structures at migration heights.² A recent study by the BirdCast team, a partnership of Cornell Lab of Ornithology, Colorado State University, and University of Massachusetts Amherst, analyzed migrating bird altitudes above ground.³

² USFWS. 2022. Threats to Birds: Collisions. <https://www.fws.gov/library/collections/threats-birds- collisions>.

³ Living Bird. Autumn 2021. As viewed online 9/21/22 <https://www.allaboutbirds.org/news/new-birdcast- analysis-shows-how-high-migrating-birds-fly/#>.



Average flight heights in the western United States are at about 2,600 feet. A broad summary of the range of altitudes that most birds migrate includes 500 to 6,000 feet above ground level (AGL) for songbirds; 1,000 to 13,000 feet AGL for shorebirds; 200 to 4,000 feet AGL for waterfowl; and 700 to 4,000 feet AGL for raptors.⁴ Based on this information, birds migrate at higher elevations than the Project, which would have maximum building heights of 75 feet. Therefore, birds migrating to the SJWA and Lake Perris areas are expected to fly at elevations well above the Project. The commenter's assertion that thousands of migrating birds could be subject to strikes/death is not supported by the scientific studies nor is any evidence thereof provided by commenter.

The commenter provides links to websites with suggestions on how to design buildings to minimize bird strikes. Notwithstanding the information provided above, which indicates birds would fly well above the Project, the U.S. Fish and Wildlife Service (USFWS) notes threats to birds can also occur in buildings shorter than four stories and with smaller structures like glass walkways and bus stop shelters as birds can be attracted to the reflection of their natural habitat in glass and can therefore fly into it. USFWS notes that one of the simplest actions has more to do with lighting than glass.⁵ As discussed in Draft EIR Section 4.1, Aesthetics, pursuant to MVMC Section 9.08.100, exterior lighting would be unobtrusive, reduce off-site glare, and light only the intended area. Additionally, pursuant to MVMC Section 9.10.110, illumination from the Project would not exceed 0.5 footcandles on any adjacent property, whether the illumination is direct or indirect light from the source, and lighting would be designed to project downward and not create glare on adjacent properties. Minimizing artificial lights by focusing lighting down towards walkways and utilizing light shields in common areas would minimize threats to birds. Additionally, the TCMV Specific Plan "Materials & Finishes" section requires the use of materials and finishes that minimize reflection and glare, stating that "material shall not result in substantial light or glare that adversely affects day or nighttime views." Further, the TCMV Specific Plan Commercial Architectural Guidelines require the use of finish metal panels, materials, elements or wall systems that reduce reflection and glare, which will also minimize risk to birds. The Project would not result in a significant impact related to the potential for bird strikes. No revisions to the Draft EIR analysis are required.

- E-6 This comment includes information presented on the City's website about the Project. The commenter is correct that information on the City's website with respect to the status of the City of Moreno Valley General Plan 2040 is outdated. As identified in response to comment E-1 above and explained in the Draft EIR, the City has set aside the adoption of the 2040 General Plan. The City will update this outdated information on its website. However, the Draft EIR and supporting technical studies disclose the current status of the previous 2040 General Plan, and the fact that the 2006 General Plan is the currently adopted General Plan. No revisions to the Draft EIR analysis are required.
- E-7 This comment identifies various locations within the Draft EIR that reference "General Plan," without being specific to the 2006 General Plan or 2040 General Plan and asserts that this may lead to confusion for readers. The Draft EIR clearly distinguishes whether the text is referring

⁴ Smithsonian's National Zoo & Conservation Biology Institute. 2022. Help Migratory Birds. <https://nationalzoo.si.edu/migratory-birds/neotropical-migratory-bird-faqs>.

⁵ USFWS. 2025. <https://www.fws.gov/story/threats-birds-collisions-nighttime-lighting>.



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to the current 2006 General Plan of the 2040 General Plan when it is pertinent to the discussion or the analysis provided. As further described below, the instances where this is not specified are primarily associated with text that is applicable to any version of general plan adopted by the City, text that is taken directly from the City Municipal Code, or where the applicable version of the General Plan is explained within the context of the full discussion provided. An explanation for each of the references to “General Plan” raised by the commenter is provided in the table below.

Comment	Response
“Design Guidelines included in the TCMV Specific Plan and would not conflict with goals or policies outlined in the General Plan or MVMC requirements that regulate scenic quality.” (DEIR page S-8)	This General Plan reference is presented in the Draft EIR summary table and is generally referring to regulations governing scenic quality. For clarification, the text is hereby revised to indicate 2006 and 2040 General Plan (refer to Section 3.0, Draft EIR Clarification and Revisions).
“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. Therefore, this impact is less than significant” (DEIR page S-32).	This General Plan reference is presented in the Draft EIR summary table and is consistent with language in the CEQA Guidelines Appendix G checklist, which refers to any general plan. No revision to the Draft EIR is required.
“The Project, which includes roadway improvements, and features to encourage non-vehicular travel and use of transit, would not conflict with a program, plan, ordinance, and/or policy addressing the circulation system, including SCAG’s Connect SoCal, the General Plan, and the MVMC resulting in a less than significant impact” (DEIR page S-37)	This General Plan reference is presented in the Draft EIR summary table. For clarification, the text is hereby revised to indicate 2006 or 2040 General Plan (refer to Section 3.0, Draft EIR Clarification and Revisions).
“The area immediately north of the Project site has an “R5 Residential” land use designation in the City of Moreno Valley General Plan (General Plan) and is zoned “Residential 5 (R5) District.” (DEIR page 2-30)	The Draft EIR does not include page 2-30; however, similar text is presented on Draft EIR page 2-1. For clarification, the text is hereby revised to indicate that these land uses designations are referring to the current land uses designations as identified in the 2006 General Plan (refer to Section 3.0, Draft EIR Clarification and Revisions).
“the Specific Plan zoning district allows for “flexibility in design and development requirements which will afford the opportunity to create major developments on large tracts of land which will implement the general plan and the planned industrial, planned residential and planned commercial designations shown on the general plan map,” (DEIR page 3-7)	This text is citing MVMC Section 9.13, Specific Plans, which is not specific to any version of the City’s general plan. No revision to the Draft EIR is required.
“Additionally, the cumulative projects would be required to adhere to established development standards addressing scenic quality as outlined in the General Plan and MVMC,” (DEIR page 4.1- 23)	This text is not specific to any version of the City’s general plan and would be applicable to any version of the general plan in effect when a development project is processed. No revision to the Draft EIR is required.
“Specific Plan and would not conflict with goals or policies outlined in the General Plan or MVMC requirements that regulate scenic quality” (DEIR page 4.1-24)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans, which are both analyzed in the Draft EIR (refer to Section 3.0, Draft EIR Clarification and Revisions).



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Comment	Response
“This cumulative impact analysis for agricultural and forest land resources considers development of the Project site in conjunction with other development projects and planned development pursuant to the City’s General Plan” (DEIR page 4.2-7)	For clarification, the text is hereby revised to indicate 2006 or 2040 General Plans, (refer to Section 3.0, Draft EIR Clarification and Revisions).
“The City does not contain any areas with General Plan land use or zoning designations for agricultural uses.” (DEIR page 4.2-7)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions).
“This cumulative impact analysis for biological resources considers development of the Project area in conjunction with other development projects in the vicinity of the Project area as well as full General Plan buildout in the City of Moreno Valley and other jurisdictions in the region within the boundaries of the Western Riverside County MSHCP.” (DEIR page 4.4-18)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions).
“As identified the Project would not conflict with the General Plan goals and policies, or the Connect SoCal goals and growth projections.” (DEIR page 4.8-18)	For clarification, the text is hereby revised to indicate 2006 or 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions).
“Where discrepancies occur between the proposed TCMV Specific Plan and the MVMC, the TCMV Specific Plan development standards would prevail. Where no regulations or guidelines are specified in the TCMV Specific Plan, the City’s General Plan and MVMC would govern development.” DEIR page 4.11-23)	This text is not specific to any version of the City’s general plan and would be applicable to any version of the general plan in effect when a project implementing the TCMV Specific Plan is processed. No revision to the Draft EIR is required.
“The existing Environmental Safety section of the General Plan Safety Element and proposed Noise Element rely on the transportation noise criteria that are derived from standards contained in the California Office of Planning and Research (OPR) General Plan Guidelines.” (DEIR page 4.13-6)	The text in the Draft EIR preceding this excerpt clearly distinguishes that the 2006 General Plan includes noise standards in the Environmental Safety section of the Safety Element, and the proposed 2040 General Plan includes noise standards in the Noise Element. The referenced OPR General Plan Guidelines are applicable to the 2006 General Plan and proposed 2040 General Plan. No revision to the Draft EIR is required.
“City of Moreno Valley General Plan Community Noise Compatibility Matrix, Table N-1 (Exhibit 3-A of EIR Technical Appendix K).” (DEIR page 4.13-9)	This text is a footnote in Draft EIR Table 4.13-2, and the referenced table is from the 2040 General Plan. This table replicates the noise compatibility information from the OPR General Plan Guidelines and would be applicable to development under the 2006 General Plan or 2040 General Plan. No revision to the Draft EIR is required.
“Additionally, for future development located in areas where exterior noise levels exceed the land use compatibility standards as defined in the Noise Element, site-specific interior noise analyses demonstrating compliance with the interior noise standards of Title 24 and the General Plan would be required” (DEIR page 4.13-21)	This text is not specific to any version of the City’s general plan and would be applicable to any version of the general plan in effect when a project implementing the TCMV Specific Plan is processed. No revision to the Draft EIR is required.
“Based on the General Plan land use compatibility guidelines as shown on Exhibit 3-A of EIR Technical Appendix K. For conditionally acceptable land use, new	The referenced table is from the 2040 General Plan. This table replicates the noise compatibility information from the OPR General Plan Guidelines and would be



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construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.” (DEIR page 4.13-23)	applicable to development under the 2006 General Plan or 2040 General Plan. No revision to the Draft EIR is required.
“intended to recover for each new residential, commercial, and industrial development, its reasonable share, of the cost of each type of public facility and infrastructure improvements needed to serve that development and to ensure implementation of, and consistency with the City’s General Plan and to protect the public health, safety, and welfare by ensuring that adequate public facilities and related improvements will be constructed and made available to serve new residential development concurrent with the need.” (DEIR page 4.15-7)	This text is citing MVMC Title 3, Revenue and Finance, which is not specific to any version of the City’s general plan. No revision to the Draft EIR is required.
“The amount of land required to be dedicated to the City for parks and recreation facilities is to be consistent with the standards and policies for park facilities adopted in the General Plan or an applicable specific plan. As identified above, the City has established a standard of 3 acres per 1,000 residents” (DEIR page 4.15-8)	This text is citing MVMC Chapter 3.40, which is not specific to any version of the City’s general plan. No revision to the Draft EIR is required.
“Landscape and Water Efficiency Requirements, provides landscape development requirements consistent with the goals and policies of the General Plan, and implements landscape-related General Plan objectives and compliance with California Model Water Efficiency Ordinance.” (DEIR page 4.18-11)	This text is citing MVMC Chapter 9.17, which is not specific to any version of the City’s general plan. No revision to the Draft EIR is required.
“The General Plan and Moreno Valley zoning ordinance anticipate development of the Project site. Implementation of the Project would commit the Project site to a mixed-use development consisting of residential, commercial/civic, and park uses.” (DEIR page 5-3)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions).
“The Project and its environmental effects would not compel or commit surrounding properties to land uses other than those that are existing today or those that are planned by the City’s General Plan and zoning ordinance. For this reason, the Project would not result in a significant, irreversible change to nearby, off-site properties” (DEIR page 5-3)	This text is not specific to any version of the City’s general plan and would be applicable to any version of the general plan since the City’s General Plan includes the land use plan for development within the City. No revision to the Draft EIR is required.
“However, this type of growth is already anticipated in the City’s General Plan, and as identified on Figure 4.0-1, Cumulative Projects Location Map, is already being proposed. Therefore, implementation of residential and nonresidential uses allowed by the proposed TCMV Specific Plan would support existing uses in the area, and could encourage or facilitate the growth envisioned in the General Plan.” (DEIR page 5-6)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions).
“Accordingly, the Project’s potential influence on other nearby properties to redevelop at greater intensities	This text is not specific to any version of the City’s general plan and would be applicable to any version of



Comment	Response
and/or different uses than the City's General Plan and zoning ordinance allow is speculative." (DEIR page 5-6)	the general plan since the City's General Plan includes the land use plan for development within the City. No revision to the Draft EIR is required.
"As with the Project, the Reduced Development – Less Residential Alternative would comply with City requirements and would not conflict with General Plan policies related to transportation and circulation, including the construction of adjacent roadways and access improvements necessary to serve the Project, and the construction of improvements to encourage pedestrian and bicycle travel, and transit use" (DEIR page 6-19)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions).
"As with the Project, the Reduced Development – Less Commercial Alternative would comply with City requirements and would not conflict with General Plan policies related to transportation and circulation, including construction of adjacent roadways and access improvements necessary to serve the Project, and construction of improvements to encourage pedestrian and bicycle travel, and transit use." (DEIR page 6-28)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions)
"As with the Project, this Alternative would have less than significant impacts related to impacts on a scenic vista, and conflict with goals or policies outlined in the General Plan or MVMC requirements that regulate scenic quality, and no impact related to degrading scenic resources within a State Scenic Highway." (DEIR page 6-31)	For clarification, the text is hereby revised to indicate 2006 and 2040 General Plans (refer to Section 3.0, Draft EIR Clarification and Revisions).

- E-8 This comment incorrectly asserts that the Draft EIR is written with an expectation that the 2040 General Plan will be readopted by the City, and also incorrectly refers to the Project site as encompassing 1,200 acres. Draft EIR Section 3.1, Project Background, clearly outlines that the City is currently going through the process to reconsider the 2040 General Plan, Municipal Code, Zoning, and Climate Action Plan consistent with the Court's decision and does not suggest or otherwise assume that the 2040 General Plan will be readopted. The Draft EIR acknowledges the 2040 General Plan as the City issued a Notice of Preparation of a Revised Environmental Impact Report for MoVal 2040: The Moreno Valley Comprehensive General Plan Update, Municipal Code and Zoning (including Zoning Atlas) Amendments, and Climate Action Plan, and to ensure that the Project's consistency with the 2040 General Plan is evaluated should it be readopted before the Project is considered for approval by the City Council.

Further, Draft EIR Section 3.1, Project Background, outlines strategic planning activities that the City has conducted since 2016 that envision the implementation of a "town center" in the City. These strategic planning activities lead to the City selecting the Project Applicant for development of a mixed-use master-planned project at the Project site. The Project Applicant and the City negotiated a purchase agreement for vacant city parcels which comprise the Project site to create the proposed TCMV Specific Plan. Based on this past history, and the City's reconsideration of the 2040 General Plan, for purposes of analysis it is reasonable to



evaluate the Project with respect to not only the proposed 2040 General Plan but also the existing 2006 General Plan. Further, the proposed TCMV Specific Plan has been written such that it is not dependent on adoption of the 2040 General Plan. The Draft EIR adequately addresses the physical environmental impacts of the Project under the 2006 General Plan and the proposed 2040 General Plan.

Refer to response to comment E-1, which addresses the incorrect information provided in the comment regarding the Project site encompassing 1,200 acres. As identified, the referenced 1,200-acre area is the approximate area designated as “Downtown Center” in the previously adopted 2040 General Plan. The Project site encompasses approximately 69.6 gross acres and represents only a small portion (approximately 5.8%) of the identified Downtown Center area. The Project does not, and is not required to, implement all of the anticipated components of the Downtown Center area as envisioned by the City in the previous 2040 General Plan. No revisions to the Draft EIR analysis are required.

- E-9 This comment incorrectly states that the Project site encompasses 1,200 acres and should be the location of the “Central Park” anticipated to be located in the Downtown Center area in the 2040 General Plan. This comment also suggests consideration of an alternative to the Project involving the development of a Central Park and only 300 units at the Project site. As identified in response to comment E-1, the Central Park anticipated to be located in the Downtown Center is not envisioned at the Project site. Rather, the Project site is located along Nason Street, which is expected to be developed with higher density residential, commercial and civic uses. An alternative to the Project involving the development of a Central Park and only 300 units would not meet the Project Objectives and would not be consistent with the City’s vision for this portion of the Downtown Center area. CEQA does not require the consideration of alternatives that do not feasibly attain most of the basic objectives of a project. Therefore, no further evaluation of the suggested alternative is required. No revisions to the Draft EIR analysis are required.
- E-10 This comment indicates that the Final EIR should identify where safe crossings for school children would be provided. As discussed in Draft EIR Section 4.16, Transportation, the Project site is located south of the Moreno Valley Unified School District Early Learning Academy (located north of Cottonwood Avenue) and west of Moreno Elementary School (located east of Nason Street). The Project’s roadway improvements would be designed to ensure safe access to these schools. This includes the installation of traffic signals (and associated crosswalks) at the intersection of Street A/Alessandro Boulevard and at the intersection of Nason Street/Driveway 1/Larkmead Court, a modified traffic signal at Nason Street and Bay Avenue, and intersection improvements at other intersections adjacent to the Project site. There is an existing Class II bikeway and sidewalk along Nason Street adjacent to the Project site, and a planned Class II bikeway and sidewalk along Alessandro Boulevard, which would be constructed as part of the Project. A Class III bikeway and sidewalk are planned along Cottonwood Avenue, which would also be constructed as part of the Project. The proposed on-site circulation system would provide direct connections to these bikeways and sidewalks to encourage and facilitate bicycle and pedestrian travel within the area. Further, the Project would include sidewalks on site that would provide connections to site-adjacent



roadways and nearby bus stops. The proposed circulation system would ensure safe travel to the nearby schools. No revisions to the Draft EIR analysis are required.

- E-11 This comment requests information on the Project's consistency with 2040 General Plan policies addressing Complete Streets and the implementation of a layered circulation network and provides a link to the Smart Growth America website, which includes information about Complete Streets. As described in the 2040 General Plan Circulation Element, which cites the National Complete Street Coalition, a program of Smart Growth America, the precise definition of a Complete Street can vary depending on the context and primary roadway users, but there are some common elements found in successful Complete Streets policies. These policies consider the needs of all users of the street in the planning, design, construction, operation, and maintenance of transportation networks. Draft EIR Table 4.16-4 included in Section 4.16, Transportation, of the Draft EIR, provides a detailed analysis of the Project's consistency with goals and policies outlined in the 2040 General Plan, including Policies C.2-1 and C.2-2, which address Complete Streets and the implementation of a layered circulation network. As discussed in the Draft EIR, while these policies are intended to guide City actions and are not particularly applicable to individual development projects, the Project would not conflict with these policies. As discussed in Draft EIR Section 3.0, Project Description, the Project would involve the construction of public roadways within the Project site (extension of Bay Avenue and construction of a north-south road between Cottonwood Avenue and Alessandro Boulevard), and completion of roadway improvements for site adjacent roadways. The roadway improvements would be implemented in accordance with City standards for the respective General Plan roadway classifications as outlined in the Circulation Element and Circulation Diagram and would provide connectivity in the area for vehicular and non-vehicular modes of travel. The Project would not conflict with the City's policies related to Complete Streets as presented in the 2040 General Plan. No revisions to the Draft EIR analysis are required.
- E-12 This comment requests information on the location of the transit center anticipated by the proposed 2040 General Plan in the Downtown Center. As discussed in the policy consistency analysis provided in Draft EIR Section 4.16, Transportation (Table 4.16-4), the Project site is not the anticipated location of a Transit Center/Mobility Hub within the Downtown Center; that facility is expected to be located on another site near the hospital uses to the south. Further, as described in Draft EIR Section 3.0, Project Description, there are bus stops on Nason Street (at Cottonwood Avenue and Alessandro Boulevard) as well as a stop on Alessandro Boulevard (toward the southwestern corner of the Specific Plan area). Based on coordination with the Riverside Transit Agency (RTA) conducted by the City and the Project Applicant during preparation of the proposed TCMV Specific Plan, potential new bus routes and bus stops may be implemented within the Specific Plan area with the specific locations to be determined in coordination with RTA during the processing of site development plans. Bus stops would incorporate features to encourage transit use such as lighting, shading, ample seating spaces, and landscaping, and would be reviewed and approved by RTA and the City. No revisions to the Draft EIR analysis are required.
- E-13 This comment incorrectly states that the buildings need to be LEED certified and that the suggested sustainable features need to be incorporated into the Project. Additionally, this



comment references and provides a link to a ULI document produced in 2007 titled “Developing Successful Town Centers,” which presents the results of a ULI workshop, including a definition of town centers and ten principles for creating them. This document highlights various developments throughout the United States, including Victoria Gardens in the City of Rancho Cucamonga, that was developed by the proposed TCMV Specific Plan Project Applicant.

The City of Moreno Valley does not have any requirements for the construction of LEED-certified buildings, for the implementation of specific sustainable features beyond those required by applicable regulations, or to implement specific recommendations from the 2007 ULI document regarding sidewalks referenced in the comment. Therefore, the suggested sustainable features are not required.

Notwithstanding, the proposed TCMV Specific Plan provides the framework for the development of the Project site, and as identified in the proposed Town Center at Moreno Valley Specific Plan, the Project is envisioned as a mixed-use community with a collection of complementary and diverse uses, designed to create a vibrant regional destination and central gathering place. As a walkable community there would be interconnected plazas, urban niches, landscaped open spaces, and walkable corridors that would enhance the quality of life and visual appeal of the Town Center at Moreno Valley as a desirable district to “live, work and play.” The proposed development envisioned by and allowed pursuant to the proposed TCMV Specific Plan does not conflict with principles outlined in the 2007 ULI document for developing a successful town center. Additionally, the Project does incorporate numerous sustainable features identified below, which include features suggested by the commenter:

- The Project would provide required interior and exterior facilities necessary to facilitate recycling as required by the existing regulations, which are further outlined in EIR Section 4.18, Utilities and Services Systems, and specifically subsection 4.18.2, Regulatory Setting.
- As described in the Draft EIR Section 3.4.3.F, Utility Infrastructure Improvements, the final type and size of water quality best management practices (BMPs) would be developed in the required final water management plans (WQMPs) for future projects implementing the TCMV Specific Plan; however, BMPs that would allow for infiltration that would be implemented could include, but would not be limited to: infiltration trenches, infiltration basins, permeable pavement, and bioretention facilities.
- The landscape plans would incorporate climate-appropriate, water-wise landscaping features that are identified in the County of Riverside Guide to California Friendly Landscaping (MVMC Section 9.17.030). As identified in the proposed TCMV Specific Plan Section 5.11.4, landscaping would be used within large, paved areas to reduce heat island effect. While MVMC Section 9.17.030 allows the planting of palm trees, shade trees and shade structures would be used in gathering spaces and in parking lots (to reduce the amount of heat absorbed by paved parking surfaces).
- While the Project does not envision vertical mixed use in the commercial area, as identified on the proposed TCMV Specific Plan conceptual land use plan provided in



Draft EIR Section 3.6, it creates a horizontal mixed-use environment by having residential uses within close proximity to the commercial uses.

- The proposed TCMV Specific Plan would adhere to the Moreno Valley Landscape and Water Efficiency Requirements (MVMC Chapter 9.17) as well as CALGreen requirements related to water conservation. Water-efficient plumbing fixtures would be installed in buildings and water-conserving irrigation as well as climate-appropriate landscaping would be utilized.
- Draft EIR MM 4.8-1 included in Draft EIR Section 4.8, Greenhouse Gas Emissions, and revised in Section 3.0 of this Final EIR to include additional measures, requires the use of on-site renewable energy sources such as solar, to reduce electrical demand. The non-residential voluntary requirements outlined in Division A5.211, Renewable Energy, of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Code would be mandatory for the Project.
- As described in proposed TCMV Specific Plan Section 1.3.2, Green Building-Sustainable Development, and Draft EIR Section 3.4.3.B, Circulation and Parking, the Project would accommodate the use of alternative means of transportation. This includes the construction of pedestrian and bicycle facilities.
- As described in Draft EIR Section 3.4.3.B, Circulation and Parking, sidewalks would be constructed along site-adjacent roadways where they do not currently exist, and the on-site pedestrian circulation system would provide direct connections to these sidewalks to encourage and facilitate pedestrian travel within the area. Consistent with the information presented in this comment about designing sidewalks, as excerpted from the 2007 ULI document, the sidewalks would be activated due to their location within the proposed commercial, open space and residential area, and the connectivity provided throughout the site. Sidewalks would be occupied throughout the day and evening. As described in TCMV Specific Plan Chapter 5.0, TCMV SP Design Guidelines, and Draft EIR Section 3.4.3.D, Design Guidelines, the thoroughfares, streets, and walkways would include a planting design that reinforces the community's character and creates a strong neighborhood identity utilizing such design features as theme trees and places of respite. Additionally, maintenance would be ensured through the requirements outlined in Chapter 6, Implementation and Administration, of the proposed TCMV Specific Plan. Where appropriate, sidewalks and pedestrian pathways would be lit for visibility during low-light hours.
- As described in proposed TCMV Specific Plan Section 1.3.2, Green Building-Sustainable Development, construction activities would involve the use of recycled building materials and local sources of building materials, to the extent feasible.
- As described in proposed TCMV Specific Plan Section 1.3.2, Green Building-Sustainable Development, and Draft EIR Section 4.6, Energy, the Project would include required electric vehicle (EV) parking stalls and conduits for EV charging stations.

No revisions to the Draft EIR analysis are required.

- E-14 The comment requests information about the covenants, conditions and restrictions (CC&Rs) for the Project and the need for police and fire protection facilities. The applicability of CC&Rs



for the future development is not pertinent to and does not affect the environmental analysis for the Project provided in the Draft EIR. With respect to police and fire protection facilities, Draft EIR Section 4.15, Public Services and Recreation, addresses the increased demand for public services. As identified, the City has determined that the Project would not require the construction of new altered police or fire protection facilities; therefore, no physical environmental impacts would result. Additionally, the Project Applicant would be required to comply with the provisions of MVMC Title 3 related to DIF payments for fire and police facilities, which would be used for the purpose of acquiring, designing, constructing, improving, providing, and maintaining, fire and police services facilities, and would ensure the contribution of the Project's fair share of the cost of these facilities. As explained in the Draft EIR, impacts related to police and fire protection would be less than significant, and mitigation measures are not required. No revisions to the Draft EIR analysis are required.

- E-15 This comment identifies that Alessandro Boulevard is a City-designated truck route, that diesel trucks will travel along this roadway, and the air quality and noise impacts from diesel trucks along this truck route to future residents and occupants at the Project site should be evaluated in the Final EIR. Pursuant to the Supreme Court decision regarding the assessment of the environment's impacts on projects (*California Bldg. Indus. Assn. v. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369, 378 [2015]), it is not the purview of the CEQA process to evaluate the impact of existing environmental conditions on a proposed project. Therefore, the requested analysis is not required.
- E-16 This comment indicates that the EIR alternatives should include an "environmentally/sustainability superior model" and suggests specific features that should be included. As identified in Draft EIR Section 6.0, Alternatives, CEQA Guidelines Section 15126.6(a) states: "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project..."

The Project's significant and unavoidable air quality and GHG emissions impacts during operation are primarily the result of the emissions resulting from mobile sources (vehicles). Neither the Project Applicant nor the City have regulatory authority to control tailpipe emissions. There are no alternatives, beyond alternatives that reduce vehicular trips, that would reduce or avoid the Project's significant impacts related to operational air quality and GHG emissions. Therefore, as required by CEQA, and as described in EIR Section 6.0, Alternatives, the alternatives evaluated in the EIR focused on alternatives that serve to reduce vehicular trips and associated emissions, thereby reducing or avoiding the Project's significant and unavoidable impacts. The analysis includes the CEQA-required No Project alternative, a Reduced Development/Less Residential Alternative, Reduced Development/Less Commercial Alternative, and Reduced Development/Less Residential and Less Commercial Alternative. This represents a reasonable range of alternatives that would feasibly attain most of the Project objectives. Contrary to the comment's suggestion, an "environmentally/sustainability superior model" is not required by CEQA. Consistent with the requirements of CEQA, the Draft EIR's alternatives analysis identified an environmentally superior alternative. The Reduced



Development – Less Residential Alternative was determined to be the environmentally superior alternative compared to the Project and the other development alternatives.

The Project would not result in any significant environmental impacts that are a result of the Project's design or sustainability features; therefore, analysis of an additional environmentally/sustainability superior alternative and incorporation of the sustainable features suggested by the comment is not required.

- E-17 This comment, with one exception, presents photographs and verbatim text excerpted from the previously adopted 2040 General Plan describing the vision for the “Downtown Center” (starting on page 2-17). It should be noted that the previous 2040 General Plan page 2-17, 2nd sentence, reads: *Design **guidelines** for development at the core of the Downtown Center seek to take advantage of the relatively flat terrain and promote higher building heights to help build visual connections from other locations within the community and enhance the prominence of the Downtown Center as an important destination.* The commenter incorrectly replaced the word guidelines with “standards.” As discussed above in Response E-1, the Project implements a relatively small component of the overall Downtown Center area. The Project would not conflict with and would serve to implement this vision as stated in the previously adopted 2040 General Plan. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-18 This comment restates Policy LCC.2-1 excerpted from the previously adopted 2040 General Plan regarding creation of a Downtown Center. The Project's consistency with this policy is addressed in Draft EIR Table 4.1-2. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-19 This comment restates Policy LCC.2-2 excerpted from the previously adopted 2040 General Plan regarding the preparation of area plans demonstrating consistency with principles included in the 2040 General Plan. As identified in MVMC Section 9.13.010, specific plans are a tool for the systematic implementation of the General Plan. The Projects' consistency with this Policy is addressed in Draft EIR Section 4.11, Land Use and Planning, which identifies that this policy and associated Downtown Center Development Principles related to Land Use and Urban Design are met through implementation of the proposed TCMV Specific Plan. Further, the proposed TCMV Specific Plan includes land use and development standards, and design guidelines that ensure compliance with General Plan policies. A conceptual land use plan for the Specific Plan area is provided in Draft EIR Section 3.0, Project Description. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-20 This comment restates Policy LCC.2-3 excerpted from the previously adopted 2040 General Plan regarding the creation of a central core with mixed uses within the Downtown Center. This policy is applicable to the City's overall planning efforts for the Downtown Center area, of which the Project is only a part. Notwithstanding, the Project is consistent with this policy to the extent that it allows for the creation of a high intensity mixed-use development near the intersection of Nason Street and Alessandro Boulevard. The proposed TCMV Specific Plan would allow for the development of commercial, residential and open space uses, which would



be activated during the day and evening. The Riverside University Health System Medical and Surgical Center (RUMC) is located approximately 0.25 mile south of the Project site and the Project would facilitate connectivity to this use through the construction of roadway, bikeway and/or sidewalk improvements along Nason Street and Alessandro Boulevard. The Project would not conflict with this policy. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.

- E-21 This comment restates Policy LCC.2-4 excerpted from the previously adopted 2040 General Plan related to attracting higher-wage employers to the Downtown Center. This policy is applicable to the City's overall planning efforts for the Downtown Center area, of which the Project is only a part. The proposed TCMV Specific Plan would allow for the development of various types of non-residential uses within the designated commercial area. The Project would not conflict with this policy. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-22 This comment consists of three pictures excerpted from the 2040 General Plan Land Use and Community Character section. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-23 This comment restates Policy LCC.2-6 excerpted from the previously adopted General Plan 2040 related to creation of a Central Park and suggests the Central Park should be included within the Project site incorrectly identified as 1,200 acres. As identified in response to comment E-1, the Project site represents a relatively small part of the overall 1,200-acre Downtown Center area. The Central Park, anticipated to be located in the Downtown Center, is not envisioned at the Project site. Rather, the Project site is located along Nason Street, which is expected to be developed with higher density residential, commercial, and civic uses. No revisions to the Draft EIR analysis are required.
- E-24 This comment restates Policy LCC.2-8 excerpted from the previously adopted General Plan 2040 related to the transformation of Nason Street and Alessandro Boulevard announcing arrival into Downtown Moreno Valley. The Project's consistency with this policy is addressed in Draft EIR Table 4.1-2. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-25 This comment restates Policy LCC.2-10 excerpted from the previously adopted General Plan 2040 related to encouraging bicycling and walking as well as electric and autonomous vehicles. The Project's consistency with this policy is addressed in Draft EIR Table 4.1-2. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-26 This comment restates one of the Downtown Center development principles excerpted from the previously adopted 2040 General Plan related to preservation of views of hills to the southeast and incorrectly asserts that this issue was not addressed in the Draft EIR. The analysis presented in Draft EIR Section 4.1, Aesthetics, and specifically Threshold "a" evaluates the Project's impacts on scenic vistas. As identified, the public roadways surrounding the Project site are not identified as being within a View Corridor. Additionally, the Project site is not



visible from identified view corridors; the nearest view corridors are approximately 0.5-mile southwest of the Project site (generally from Moreno Beach Road), and approximately 0.9-mile northeast of the Project site (generally from Eucalyptus Avenue). Although not identified as view corridors in the City's current 2006 General Plan or proposed 2040 General Plan, the views available from existing roadways that extend north-south (Nason Street), and east-west (Alessandro Boulevard and Cottonwood Avenue) adjacent to the Project site would largely be retained. The proposed development would obstruct distant views currently available across the vacant site; however, the east-west extension of Bay Avenue through the site, and implementation of a new north-south roadway connecting Cottonwood Avenue and Alessandro Boulevard would provide additional access to mountain views for the public traveling through the site. Further, the proposed public open space/park areas would be located along the proposed east-west and north-south roadways, which would further expand the view sheds from the vantage points.

Further, the Project site has been previously graded and does not retain any natural topography. The Project site is relatively flat. Due to the relatively flat topography of the Project site and surrounding areas, views of the site from distant vantage points are limited.

Therefore, the Project would not conflict with this development principle. No revisions to the Draft EIR analysis are required.

- E-27 This comment restates one of the Downtown Center development principles related to circulation (the extension of Brodiaea) excerpted from the previously adopted 2040 General Plan. Brodiaea Avenue is an east-west street located approximately 0.25-mile south of the Project site. This development principle is not applicable to the Project. No revisions to the Draft EIR analysis are required.
- E-28 This comment restates one of the Downtown Center development principles related to circulation (create a layered network of roadways) excerpted from the previously adopted 2040 General Plan. This principle is intended to guide City actions and is accomplished through the implementation of the City's General Plan Circulation Element, which identifies the location and classification of various roadways to be developed within the City. As discussed in Section 4.16, Transportation, of the Draft EIR, the proposed TCMV Specific Plan has been developed to implement, or facilitate future implementation where applicable, of this development principle. The Project would involve the construction of public roadways within the Project site (extension of Bay Avenue and construction of a north-south road between Cottonwood Avenue and Alessandro Boulevard), and completion of roadway improvements for site adjacent roadways. The roadway improvements would be implemented in accordance with City standards for the respective General Plan roadway classifications as outlined in the Circulation Element and Circulation Diagram and would provide connectivity in the area for vehicular and non-vehicular modes of travel. As such, and as further identified in Draft EIR Section 4.16, Transportation, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.



- E-29 This comment restates one of the Downtown Center development principles related to circulation (related to creating smaller urban blocks) excerpted from the previously adopted 2040 General Plan. The Project is designed to promote walkability and access to the non-residential uses and adjacent neighborhoods utilizing sidewalks, linear park access and designated paths of travel for pedestrians. TCMV Specific Plan Figure 17, Non-Vehicular Circulation (included as Draft EIR Figure 3-7, Project Access/Circulation) provides proposed access locations to facilitate walkability and pedestrian access within the development. As identified in Draft EIR Section 4.16, Transportation, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-30 This comment restates one of the Downtown Center development principles related to circulation (provision of a transit center) excerpted from the previously adopted 2040 General Plan. As identified in response to comment E-12, the Project site is not the anticipated location of a Transit Center/Mobility Hub within the Downtown Center; that facility is expected to be located near the hospital uses to the south. There are existing bus stops near the Project site and the Project would facilitate access to these facilities. Based on coordination with the RTA conducted by the City and the Project Applicant during preparation of the proposed TCMV Specific Plan, potential new bus routes and bus stops may be implemented within the Specific Plan area with the specific locations to be determined in coordination with RTA during the processing of site development plans. Bus stops would incorporate features to encourage transit use such as lighting, shading, ample seating spaces, and landscaping, and would be reviewed and approved by RTA and the City. As identified in Draft EIR Section 4.16, Transportation, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-31 This comment restates one of the Downtown Center development principles related to circulation (street network characteristics) excerpted from the previously adopted 2040 General Plan. This development principle is intended to guide City actions and is accomplished through the implementation of the City's General Plan Circulation Element, which identifies the location and classification of various roadways to be developed within the City. Refer to the response to comment E-28 above, which addresses the circulation network. As identified in Draft EIR Section 4.16, Transportation, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-32 This comment restates one of the Downtown Center development principles related to circulation (electric and autonomous vehicles) excerpted from the previously adopted 2040 General Plan. The Project would include electric vehicle (EV) parking stalls and conduits for EV charging stations. Additionally, as identified in Draft EIR Section 3.0, Project Description, residents would have the ability to access proposed commercial and retail by foot, bicycle or neighborhood electric vehicle (NEV). As identified in Draft EIR Section 4.16, Transportation, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.



- E-33 This comment restates one of the Downtown Center development principles related to circulation (connection between destinations within the Downtown Center) excerpted from the previously adopted 2040 General Plan. The Project site is not adjacent to the RUMC, Aquabella, or Kaiser Hospital Campus, which are located south of the Project site. However, the RUMC is located approximately 0.25 mile south of the Project site and the Project would facilitate connectivity to this use through the construction of roadway, bikeway and/or sidewalk improvements along Nason Street and Alessandro Boulevard. The Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-34 This comment restates one of the Downtown Center development principles related to circulation (design interconnecting streets to break up the superblocks) excerpted from the previously adopted 2040 General Plan. The streets adjacent to the Specific Plan area would be built to City standards. Alessandro Boulevard and Nason Street are both designated as Divided Arterials whereas Cottonwood Avenue is designated a Minor Arterial. Each of these streets would include a landscaped parkway adjacent to the sidewalks. A traffic signal exists at the intersection of Nason Street and Bay Avenue, and two other signals would be constructed, one adjacent to the commercial Planning Area on Nason Street and the other at the intersection of Alessandro Boulevard and the proposed A Street. To further break up block lengths there would be entries to the Planning Areas that are taken from these backbone streets. Streets that are internal to the Planning Areas would have smaller block lengths due to the envisioned buildings (e.g. detached homes, duplex, townhomes) and these Planning Areas would also have landscaping throughout and pedestrian walkways. Other than the commercial and park Planning Areas, the proposed TCMV Specific Plan Planning Areas are envisioned for residential uses. As a result, streets would be narrower than the backbone streets and would contain breaks in block lengths due to driveways, parking spaces, and intersections. As identified in Draft EIR Section 4.16, Transportation, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-35 This comment restates one of the Downtown Center development principles related to circulation (connect the trail network) excerpted from the previously adopted 2040 General Plan. This development principle is not applicable to the Project as the identified roadways are not located adjacent to the Project site. Additionally, the Project would not preclude the City's ability to implement this policy. The Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-36 This comment suggests that the Project would not provide the referenced circulation elements for the Downtown Center, would make them more difficult to achieve, and requests that the Final EIR explain how the Project with 1,200 acres would accomplish these circulation elements. As previously identified in response to comment E-1, the Project site represents only a small portion (approximately 5.8%) of the identified 1,200-acre Downtown Center area. The Project does not, and is not required to, implement all of the anticipated components of the Downtown Center area as envisioned by the City in the previous 2040 General Plan. Refer to the responses above, which discuss the 2040 General Plan policies and development principles



and demonstrate that the Project does not conflict with these policies and development principles. No revisions to the Draft EIR analysis are required.

- E-37 This comment restates one of the Downtown Center development principles related to parks and open space (provide linear Central Park) excerpted from the previously adopted 2040 General Plan. Refer to the response to comment E-1 above, which explains that the Central Park anticipated to be located in the Downtown Center is not envisioned at the Project site. Rather, the Project site is located along Nason Street, which is expected to be developed with higher density residential, commercial and civic uses. The Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-38 This comment restates one of the Downtown Center development principles related to parks and open space (connect the RUMC and the Nason/Alessandro Town Center development) excerpted from the previously adopted 2040 General Plan. This development principle is intended to guide City actions associated with implementation of development within the Downtown Center area. The Project would assist the City in providing this connectivity with the implementation of pedestrian facilities within the TCMV Specific Plan area and specifically within the proposed commercial area at the corner of Nason Street and Alessandro Boulevard. Additionally, pursuant to the proposed TCMV Specific Plan, public art would be included as part of the development within the Specific Plan area. As discussed in Draft EIR Section 4.11, Land Use and Planning, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-39 This comment restates one of the Downtown Center development principles related to parks and open space (create a network of public outdoor spaces) excerpted from the previously adopted 2040 General Plan. As described in Draft EIR Section 3.0, Project Description, the Project includes approximately 4.9 acres of open space area, including an approximately 3.5-acre area to be centrally located and open to the public, and an approximately 1.4-acre linear park. The open space areas would provide passive and recreational opportunities for the community. The location of parks near the commercial/civic uses would add an enhanced visitor and resident experience to the community as people could conveniently spend time in both the commercial and the park spaces. As discussed in Draft EIR Section 4.11, Land Use and Planning, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-40 This comment restates one of the Downtown Center development principles related to parks and open space (public outdoor spaces in commercial and employment areas) excerpted from the previously adopted 2040 General Plan. The proposed TCMV Specific Plan Commercial Design Guidelines (Section 5.11) encourage gathering spaces and plazas. Communal gathering spaces are encouraged to promote a vibrant and interactive environment for residents, employees and visitors alike. Common use areas may include (but are not limited to): plazas, outdoor eating areas, building entry forecourts and courtyards. These places provide opportunities for activities such as outdoor eating, casual meetings and small group gatherings.



Plazas are encouraged as much as possible to emphasize a pedestrian-friendly environment by creating locations within the commercial development that allow for people to gather. Plaza and open space areas are encouraged to include amenities that stimulate their use, including seating, shade, landscaping, artwork, and play areas. As discussed in Draft EIR Section 4.11, Land Use and Planning, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.

- E-41 This comment restates one of the Downtown Center development principles related to parks and open space (parks and open space along bicycle and pedestrian routes) excerpted from the previously adopted 2040 General Plan. The proposed open space areas/parks discussed in response to comment E-39 above would be located along the new public streets that extend north-south and east-west (Bay Avenue) through the Project site, which also accommodate sidewalk and bicycle facilities. Further, as described in Draft EIR Section 3.0, Project Description, there are existing and proposed sidewalk and bicycle facilities along existing roadways surrounding the Project site that would facilitate pedestrian and bicycle access to the open space areas. As discussed in Draft EIR Section 4.11, Land Use and Planning, the Project would not conflict with this development principle. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-42 This comment consists of a picture excerpted from the previously adopted 2040 General Plan Land Use and Community Character section. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- E-43 This comment indicates that the Specific Plan and Final EIR for the Town Center at Moreno Valley should be part of the larger project envisioned and not just a standalone-project. Although not stated, it is assumed that the commenter is referring to the Downtown Center envisioned in the previously adopted 2040 General Plan. The comment further indicates that the connectivity between the Project and the lands to the south must be planned with the Project. As previously identified in response to comment E-1, the Project site represents only a small portion (approximately 5.8%) of the identified 1,200-acre Downtown Center area. The Project does not, and is not required to, implement all of the anticipated components of the Downtown Center area as envisioned by the City in the previous 2040 General Plan. Rather, the previous 2040 General Plan acknowledges that individual projects will be processed by the City to implement the vision for the Downtown Center, with each implementing project required to demonstrate consistency with the development principles outlined for the Downtown Center. As discussed in response to comments E-19 through E-41 above, the Project does not conflict with the applicable development principles.
- E-44 The comments requests notification of documents and meetings related to this Project. The commenter is on the Project notification list and will be informed of documents and meetings related to the Project, as requested.



COMMENT LETTER F

From: George Hague <gbhague@gmail.com>
Sent: Thursday, April 10, 2025 9:18 PM
To: planningnotices@moval.org <planningnotices@moval.org>
Cc: City Clerk <cityclerk@moval.org>; emilye@moval.org <emilye@moval.org>
Subject: [External] Additional Sierra Club comments on the Moreno Valley Town Center Draft EIR

Good evening Ms Elliot,

April 10, 2025

In my rush to turn in Sierra Club comments in on the Moreno Valley Town Center (MVTC) Draft EIR in a timely manner I forgot to include the couple of thoughts below my name. I hope you will include them with my others.

Thank you,

George Hague

Good evening/morning Ms Elliot,

Please accept these couple of additional thoughts on the Moreno Valley Town Center (MVTC) Draft EIR.

The Sierra Club is quite concerned that the MVTC doesn't appear to have apartment units designated for low and/or very low income residents. While sometimes a studio or a single bedroom will do, there are families with more than one child that need a home for their family. Some of them need a two or three bedroom unit. Moreno Valley needs to require developers with large housing projects to include housing for individuals/families that are designated for low or very low income.

As a retired teacher who had students from low and very low income families as well as homeless students even year, I can tell the MVTC developer that most of these students and their families are very e good people — no better and no worse than those who are able to pay for more expensive units.

The city needs to require low and very low income units scattered throughout their project instead of designating one building for such. This should be a city-wide policy.

The MVTC should also designate at least 3% to 5% of the units for those with disabilities. These could include veterans and members of our growing senior population. If our city doesn't plan for those with disabilities that in many cases have served us and our families, where are they suppose to go to find a place to live? Some of the units could even be slightly modified to make it easier for them to function with their daily acivitdes.

F-1

F-2

F-3



The Sierra Club will be looking for the Final EIR to address some of the real needs mentioned above.

Please keep the Sierra Club and me notified of all meetings and documents related to this document.

←
F-4
←

Sincerely,

George Hague

Sierra Club

Moreno Valley/Box Springs Group

Conservation Co-Chair

1325 P.O. Box 1325

Moreno Valley, CA 92556



**RESPONSES TO COMMENT LETTER F:
Sierra Club, Moreno Valley/Box Springs Group (Email)**

- F-1 This comment provides introductory remarks and does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.
- F-2 This comment incorrectly suggests that the Project does not include low and/or very low income residential units and suggests that as a citywide policy low and very low units should be spread through projects instead of designating one building for these uses. The comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR. Notwithstanding, the Project would accommodate affordable housing as required by the agreement between the City of Moreno Valley and the California Department of Housing and Community Development (HCD), executed on July 15, 2024. As described in Draft EIR Section 3.0, Project Description, and as discussed in Section 3.5.1 of the proposed TCMV Specific Plan, the “Residential” land use component of the Project is required to include an approximately 3-acre parcel (the “Affordable Housing Site”) for the development of affordable housing units. The total number of affordable housing units would be equal to the greater of 100 affordable housing units or 15% of the total number of residential units developed in the TCMV Specific Plan area, including the “Affordable Housing Site.” The developer of the Affordable Housing Site would be required to record a covenant or restriction against the Affordable Housing Site that would provide that the affordable housing units developed on the Affordable Housing Site would be sold or rented at affordable housing cost, as defined in Health and Safety Code Section 50052.5, or affordable rent, as defined in Health and Safety Code Section 50053, to lower income households, as defined in Health and Safety Code Section 50079.5. The covenant or restriction would require that rental units remain affordable to, and occupied by, lower income households for a period of at least 55 years for rental housing and 45 years for ownership housing. The initial occupants of all ownership units on the Affordable Housing Site would be lower income households, and the ownership units would be subject to an equity sharing agreement consistent with Government Code Section 65915, Subdivision (c)(2). The provision of low and very low income units elsewhere within the TCMV Specific Plan area is not a requirement of the City or the agreement between the City and the HCD; however, the proposed TCMV Specific Plan does not include any provision that would preclude the development of low and very low income in other areas besides the Affordable Housing Site.
- F-3 This comment suggests that the Project should designate at least 3% to 5% of the units for those with disabilities. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR. Notwithstanding, it should be noted that there is no requirement to designate units specifically for disabled individuals; however, the residential units would be developed in accordance with the Americans with Disabilities Act (ADA) requirements.
- F-4 The comment provides closing remarks and requests notification of documents and meetings related to this Project. This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR. The commenter is on the Project notification list and will be informed of documents and meetings related to the Project, as requested.



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

COMMENT LETTER G



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VIA E-MAIL

April 10, 2025

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Moreno Valley, CA 92553

Em: planningnotices@moval.org

**RE: Town Center at Moreno Valley Specific Plan Project –
Draft Environmental Impact Report (SCH No. 2022040417)**

Dear Planning Division,

On behalf of the Western States Regional Council of Carpenters (“**Western States Carpenters**” or “**WSRCC**”), our firm is submitting these comments in connection with the City of Moreno Valley’s (“**City**”) Draft Environmental Impact Report (“**DEIR**”) for the Town Center Project (“**Project**”).

According to the DEIR, the Project Site is located on the northwest corner of the intersection of Nason Street and Alessandro Boulevard; south of Cottonwood Avenue, west of Nason Street, and north of Alessandro Boulevard, and comprises Assessor Parcel Numbers 487-470-030 and 487-470-031 “**Project Site**”). The Project proposes construction of a mixed-use development consisting of residential (including affordable housing units), commercial, civic, and open spaces. The Project will require approval of the following: General Plan Amendment, Zone Change from Public Facilities to TCMV Specific Plan, TCMV Specific Plan, Tentative Tract Map, and Certification of a Final Environmental Impact Report. (DEIR, pp. 3-1–3-7.)

The Western States Carpenters is a labor union representing over 90,000 union carpenters in 12 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development

G-1



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projects. Individual members of the Western States Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

WSRCC expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

WSRCC incorporates by reference all comments related to the Project or its CEQA review, including the prior Mitigated Negative Declaration and the Environmental Impact Report. See *Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, WSRCC requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (CEQA) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("Planning and Zoning Law") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

**I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL
WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC
DEVELOPMENT AND ENVIRONMENT**

The City should require the Project to be built by contractors who participate in a Joint Labor-Management Apprenticeship Program approved by the State of California and make a commitment to hiring a local workforce.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

G-1
(CONT.)

G-2



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[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

[L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California’s workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.¹

Furthermore, workforce policies have significant environmental benefits given that they improve an area’s jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the “[u]se of a local state-certified apprenticeship program” can result in air pollutant reductions.²

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced

¹ California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf>.

² South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>.

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communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.³

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.⁴ Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("AB2011"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

³ California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, available at <https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf>

⁴ Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, available at <http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf>.

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The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.⁵

The Western States Carpenters recommend that the City adopt additional requirements to mitigate public health risks from the Project's construction activities. The Western States Carpenters requests that the City require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon the Western States Carpenters' experience with safe construction site work practices, the Western States Carpenters recommends that the City require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.

⁵ Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, available at <https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx>.

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- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.

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- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.⁶

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The City should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

The Western States Carpenters has also developed a rigorous Infection Control Risk Assessment (“ICRA”) training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to

⁶ See also The Center for Construction Research and Training, North America’s Building Trades Unions (April 27 2020) NABTU and CPWR COVID-19 Standards for U.S. Construction Sites, available at https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

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protect themselves and all others during renovation and construction projects in healthcare environments.⁷

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

III. THE CITY SHOULD EXERCISE ITS AUTHORITY IN NEGOTIATING A DEVELOPMENT AGREEMENT TO OBTAIN ADDITIONAL COMMUNITY BENEFITS, ENVIRONMENTAL MITIGATION, AND PROJECT IMPROVEMENTS

Development agreements are a tool for municipalities to capture and receive community benefits while granting project proponents certainty for project entitlements.⁸ The City should exercise its lawful authority to enter into a Development Agreement with the Project applicant to secure additional community benefits (including local hire and apprenticeship requirements to spur local economic development) and additional environmental mitigation for the impacted community as well as project revisions that ameliorate potential environmental impacts consistent with this comment letter.

IV. THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA is a California statute designed to inform decision-makers and the public about the potential significant environmental effects of a project. 14 California Code of Regulations (“**CEQA Guidelines**”), § 15002, subd. (a)(1).⁹ At its core, its purpose is to “inform the public and its responsible officials of the environmental

⁷ For details concerning the Western States Carpenters’ ICRA training program, see <https://icrahealthcare.com/>.

⁸ Hanson Hom, Vivian Kahn, and Matt Taecker (2017) *Best Practices for Implementing a Community Benefits Program* California Planning Roundtable, available at https://cproundtable.org/static/media/uploads/infill/community_benefits_final_07152017.docx.pdf

⁹ The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 et seq., are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. Pub. Res. Code, § 21083. The CEQA Guidelines are given “great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous.” *Center for Biological Diversity v. Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 217.

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consequences of their decisions *before* they are made. Thus, the EIR “protects not only the environment but also informed self-government[.]” *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564 (internal citation omitted).

To achieve this purpose, CEQA mandates preparation of an Environmental Impact Report (“**EIR**”) for projects so that the foreseeable impacts of pursuing the project can be understood and weighed. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80. The EIR requirement “is the heart of CEQA.” CEQA Guidelines, § 15003(a).

CEQA directs public agencies to avoid or reduce environmental damage, when possible, by requiring alternatives or mitigation measures. CEQA Guidelines, § 15002, subds. (a)(2)-(3); see also *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners of the City of Oakland* (2001) 91 Cal.App.4th 1344, 1354; *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 400. The Environmental Impact Report (EIR) serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to “identify ways that environmental damage can be avoided or significantly reduced.” CEQA Guidelines, § 15002, subd. (a)(2).

A public agency must prepare an EIR whenever substantial evidence supports a “fair argument” that a proposed project “may have a significant effect on the environment.” Pub. Res. Code, §§ 21100, 21151; CEQA Guidelines, §§ 15002, subds. (f)(1)-(2), 15063; *No Oil, supra*, 13 Cal.App.3d at p. 75; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 111-112. If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in Public Resources Code section 21081. See CEQA Guidelines, §§ 15092, subds. (b)(2)(A)-(B).

Essentially, should a lead agency be presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect. CEQA Guidelines, §§ 15064(f)(1)-(2); see *No Oil, supra*, 13 Cal.App.3d at p. 75 (internal citations and quotations omitted). Substantial evidence includes “enough relevant information and reasonable inferences from this

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information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached.” CEQA Guidelines, § 15384, subd. (a).

The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. *Communities for a Better Environment v. Richmond* (2010) 184 Cal.App.4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449-450). The EIR’s function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. *Id.* For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Id.*

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the “fair argument” standard under which an EIR must be prepared whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602; *Friends of “B” St. v. City of Hayward* (1980) 106 Cal.3d 988, 1002.

Further, it is the duty of the lead agency, not the public, to conduct the proper environmental studies. “The agency should not be allowed to hide behind its own failure to gather relevant data.” *Sundstrom, supra*, 202 Cal.App.3d at p. 311.

“Deficiencies in the record may actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences.” *Ibid*; see also *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1382 (lack of study enlarges the scope of the fair argument which may be made based on the limited facts in the record).

Thus, refusal to complete recommended studies lowers the already low threshold to establish a fair argument. The court may not exercise its independent judgment on the

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omitted material by determining whether the ultimate decision of the lead agency would have been affected had the law been followed. *Environmental Protection Information Center v. Cal. Dept. of Forestry* (2008) 44 Cal.4th 459, 486 (internal citations and quotations omitted). The remedy for this deficiency would be for the trial court to issue a writ of mandate. *Ibid.*

While the courts review an EIR using an ‘abuse of discretion’ standard, the reviewing court is not to *uncritically* rely on every study or analysis presented by a project proponent in support of its position. *Berkeley Keep Jets, supra*, 91 Cal.App.4th at p. 1355 (quoting *Laurel Heights, supra*, 47 Cal.3d at pp. 391, 409 fn. 12) (internal quotations omitted). A clearly inadequate or unsupported study is entitled to no judicial deference. *Ibid.* Drawing this line and determining whether the EIR complies with CEQA’s information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 102, 131. As the First District Court of Appeal has previously stated, prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process. *Berkeley Keep Jets, supra*, 91 Cal.App.4th at p. 1355 (internal quotations omitted).

Both the review for failure to follow CEQA’s procedures and the fair argument test are questions of law, thus, the de novo standard of review applies. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435. Whether the agency’s record contains substantial evidence that would support a fair argument that the project may have a significant effect on the environment is treated as a question of law. *Consolidated Irrigation Dist., supra*, 204 Cal.App.4th at p. 207; Kostka and Zischke, *Practice Under the Environmental Quality Act* (2017, 2d ed.) at § 6.76.

Section 15088.5(a) of the CEQA Guidelines provides that an EIR must be recirculated whenever there is disclosure of significant new information. Significant new information includes: (1) disclosure of a new significant environmental impact resulting from the project or from a new proposed mitigation measure; (2) disclosure of a substantial increase in the severity of an environmental impact unless mitigation measures are adopted that reduce the impact to a level of insignificance; and (3) disclosure of a feasible project alternative or mitigation measure considerably different from others previously analyzed which would clearly lessen the significant

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environmental impacts of the project which the project proponents decline to adopt.
Id.

Additionally, an EIR must be recirculated when it is so fundamentally inadequate and conclusory in nature that meaningful public review and comment is precluded. *Id.* [citing *Mountain Lion Coalition v. Fish & Game Com.* (1989) 214 Cal.App.3d 1043].

Here, as discussed below, the DEIR fails to substantiate all of its conclusions to allow meaningful public review and comment, provide adequate mitigation measures, and fully assess all pertinent environmental factors. Accordingly, this comment letter discloses significant new information, necessitating revision and recirculation of the DEIR.

V. THE DEIR IS INADEQUATE UNDER CEQA AND SHOULD BE REVISED AND RECIRCULATED

A. The DEIR Fails to Support Various Findings Regarding Environmental Impacts with Substantial Evidence

CEQA requires that an EIR identify and discuss the significant effects of a Project, and how those significant effects can be mitigated or avoided. CEQA Guidelines § 15126.2; PRC §§ 21100(b)(1), 21002.1(a). If a project has a significant effect on the environment, an agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns.” CEQA Guidelines § 15092(b)(2) (A–B). Such findings must be supported by substantial evidence. CEQA Guidelines § 15091(b).

When new information is brought to light showing that an impact previously discussed in the DEIR but found to be insignificant with or without mitigation in the DEIR’s analysis has the potential for a significant environmental impact supported by substantial evidence, the DEIR must consider and resolve the conflict in the evidence. See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109. While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be “based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. CEQA Guidelines § 15064(b); *Cleveland Nat’l Forest Found. v. San Diego Ass’n of Gov’ts*

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(2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206. And when there is evidence that an impact could be significant, an EIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

Here, for the reasons discussed in detail below, the DEIR fails to comply with the foregoing requirements.

1. Air Quality, including Greenhouse Gas Emissions and Diesel Use

While the DEIR acknowledges the Project's potentially significant impacts on Air Quality, it fails to provide sufficient evidence or supporting analysis for the public to adequately discern and evaluate those impacts. For instance, while the DEIR acknowledges that the Project "could result in or cause NAAQS or CAAQS violations because operational-source emissions would exceed the applicable SCAQMD thresholds," it fails to describe with sufficient specificity how the Project would contribute to exceeding those thresholds, and further fails to provide sufficient analysis regarding the sources of those emissions. (DEIR, p. S-10). Without fully understanding the Project's potential impacts on air quality, it may be practically impossible to determine the adequacy of the Project's proposed mitigation measures regarding air quality impacts.

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Regarding Greenhouse Gas (GHG) emissions specifically, the DEIR only cursorily acknowledges and evaluates these impacts instead of providing detailed analysis and evidence as required by the CEQA Guidelines. For instance, the DEIR does not provide a comprehensive analysis of potential GHG emissions. Instead, the DEIR merely acknowledges that “the Project would exceed the SCAQMD significance threshold of 3,000 MTCO₂e/yr,” but does not provide a thorough breakdown of how that projection is calculated. (DEIR, p. S-26).

CEQA Guidelines § 15064.4 allow a lead agency to determine the significance of a project’s GHG impact via a qualitative analysis (e.g., extent to which a project complies with regulations or requirements of state/regional/local GHG plans), and/or a quantitative analysis (e.g., using model or methodology to estimate project emissions and compare it to a numeric threshold). So too, CEQA Guidelines allow lead agencies to select what model or methodology to estimate GHG emissions so long as the selection is supported with substantial evidence, and the lead agency “should explain the limitations of the particular model or methodology selected for use.” CEQA Guidelines § 15064.4(c).

Here, the DEIR appears to invoke both qualitative and quantitative analyses. However, the DEIR does not rely on any quantitative analysis to determine compliance with any numerical thresholds and instead relies on the Project’s purported consistency with various land use plans and regulatory schemes, in making a determination that the Project’s GHG impacts are less than significant.

CEQA Guidelines sections 15064.4(b)(3) and 15183.5(b) allow a lead agency to consider a project’s consistency with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines §§ 15064.4(b)(3) and 15183.5(b)(1) make clear qualified GHG reduction plans or CAP should include the following features:

- (1) **Inventory:** Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);
- (2) **Establish GHG Reduction Goal:** Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

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- (3) **Analyze Project Types:** Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- (4) **Craft Performance Based Mitigation Measures:** Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- (5) **Monitoring:** Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels;

Collectively, the above-listed features tie qualitative measures to quantitative results, which in turn become binding via proper monitoring and enforcement by the jurisdiction—all resulting in real GHG reductions for the jurisdiction as a whole, and the substantial evidence that the incremental contribution of an individual project is not cumulatively considerable.

Second, it is not enough for an environmental document to conclude there are no significant GHG emissions impacts based upon a determination of consistency with a GHG Reduction Plan, without also making a determination based upon substantial evidence of the project's actual cumulative contributions to GHG emissions. In other words, a determination of consistency is only a starting point.¹⁰ Compliance or non-compliance is merely one factor to be considered. The lead agency must explain how reliance on any particular plan or regulation addresses a potential impact.

Here, however, the DEIR fails to demonstrate that the GHG Reduction Plan includes the above-listed requirements to be considered a qualified CAP or GHG Reduction Plan for the City. As such, the DEIR leaves an analytical gap showing that compliance with said plans can be used for a project-level significance determination for the Project. The DEIR also fails to explain how compliance with the GHG Reduction Plan leads to a less than significant impact.¹¹

¹⁰ Cal. Nat. Res. Agency, Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines, OAL Notice File No. Z-2018-0116-12 (Nov. 2018), at p. 95; see also *Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal. App. 4th 1170, 1207 (“[A]n inconsistency between a project and other land use controls does not in itself mandate a finding of significance. [Citations.]”)

¹¹ Natural Resources Agency (Nov. 2018) Final Statement of Reasons For Regulatory Action: Amendments To The State CEQA Guidelines (“2018 Final Statement of Reason”), p. 19 (adding

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Lastly, the DEIR does not contain sufficient analysis regarding air quality impacts stemming from the use of **diesel trucks** and other **diesel-operated vehicles and equipment** during construction and operation. Instead, it provides only estimations and projections of potential diesel use without much further analysis on resulting environmental impacts. While the DEIR acknowledges the Project's "consumption of approximately 187,803 gallons of diesel fuel," it does not go much further in analyzing any environmental impacts flowing therefrom. (DEIR, p. 4.6-10; App. E, Table 4-5). Instead, the DEIR suggests that "compliance with anti-idling and emission regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy," but does not provide additional analysis to support its claim. (DEIR, p.

reference to section 15183.5 to section 15064.4(b)(3) because it was "needed to clarify that lead agencies may rely on plans prepared pursuant to section 15183.5 in evaluating a project's greenhouse gas emissions[.] ... [which] is consistent with the Agency's Final Statement of Reasons for the addition of section 15064.4, which states that 'proposed section 15064.4 is intended to be read in conjunction with . . . proposed section 15183.5. Those sections each indicate that local and regional plans may be developed to reduce GHG emissions.'"), http://resources.ca.gov/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf; see also Natural Resources Agency (Dec. 2009) Final Statement of Reasons for Regulatory Action ("2009 Final Statement of Reason"), p. 27 ("Those sections each indicate that local and regional plans may be developed to reduce GHG emissions. If such plans reduce community-wide emissions to a level that is less than significant, a later project that complies with the requirements in such a plan may be found to have a less than significant impact."), http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf; 2009 Final Statement of Reason, pp. 14-17 (To qualify, the plan "must ... include binding requirements to address a cumulative problem[.] ... such plans contain specific requirements with respect to resources that are within the agency's jurisdiction to avoid or substantially lessen the agency's contributions to GHG emissions ... consistency with plans that are purely aspirational (i.e., those that include only unenforceable goals without mandatory reduction measures), and provide no assurance that emissions within the area governed by the plan will actually address the cumulative problem[.] ... by requiring that lead agencies draw a link between the project and the specific provisions of a binding plan or regulation, section 15064(h)(3) would ensure that cumulative effects of the project are actually addressed by the plan or regulation in question.") 35 SCAG (Dec. 2015) 2016 RTP/SCS Program EIR ("PEIR"), p. 3.8-12 – 3.8-13 ("SB 375 provides that the SCS developed as part of the RTP does not regulate the use of land or dictate local land use policies, and further expressly provides that a city's or county's land use policies and regulations, including its general plan, are not required to be consistent with the SCS. Rather, SB 375 is intended to provide a regional policy foundation that local government may build upon, if they so choose." Emphasis added), http://scagrtpscscs.net/Documents/2016/peir/draft/2016dPEIR_3_8_GreenhouseGases.pdf.

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4.6-10). The DEIR should be revised in accordance with CEQA Guidelines to adequately identify and address any potential impacts stemming from diesel use.

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B. The DEIR's Mitigation Measures Are Insufficient

A fundamental purpose of an EIR is to identify ways in which a proposed project's significant environmental impacts can be mitigated or avoided. Pub. Res. Code §§ 21002.1(a), 21061. To implement this statutory purpose, an EIR must describe any feasible mitigation measures that can minimize the project's significant environmental effects. PRC §§ 21002.1(a), 21100(b)(3); CEQA Guidelines §§ 15121(a), 15126.4(a).

If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” PRC §§ 21002; 21002.1, 21081; CEQA Guidelines §§ 15091, 15092(b)(2)(A); and find that ‘specific overriding economic, legal, social, technology or other benefits of the project outweigh the significant effects on the environment.’ PRC §§ 21002; 21002.1, 21081; CEQA Guidelines §§ 15091, 15092(b)(2)(B). “A gloomy forecast of environmental degradation is of little or no value without pragmatic, concrete means to minimize the impacts and restore ecological equilibrium.” *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1039.

CEQA mitigation measures proposed and adopted are required to describe what actions will be taken to reduce or avoid an environmental impact. (CEQA Guidelines § 15126.4(a)(1)(B) [providing “[f]ormulation of mitigation measures should not be deferred until some future time.”].) While the same Guidelines section 15126.5(a)(1)(B) acknowledges an exception to the rule against deferrals, such exception is narrowly proscribed to situations where it is impractical or infeasible to include those details during the project's environmental review.

According to CEQA Guidelines, “[w]hen an EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment.” CEQA Guidelines Section 15096(g)(2).

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Here, the EIR's mitigation measures for the Project are inadequate as described below.

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**1. *The DEIR's Mitigation Measures Are Improperly Deferred
Long Term for Various Impact Categories***

CEQA forbids deferred mitigation. Guidelines § 15126.4(a)(1)(B). CEQA allows deferral of details of a mitigation measure only “when it is impractical or infeasible to include those details during the project’s environmental review.” (*Id.*) CEQA further requires: “that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard...” Guidelines § 15126.4(a)(1)(B). Deferring formulation of a Project’s actual mitigation measures to some undefined time after the Project’s approval is improper and cannot be used as a substitute for proper mitigation under CEQA. Impermissible deferral can occur when an EIR calls for mitigation measures to be created based on future studies or describes mitigation measures in general terms but the agency fails to commit itself to specific performance standards. (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [city improperly deferred mitigation to butterfly habitat by failing to provide standards or guidelines for its management].)

Here, the EIR improperly defers critical details of the Project’s mitigation measures for various environmental impacts. Specifically, various mitigation measures are deferred *until after* the City’s approval of the Project. For instance, the DEIR’s proposed mitigation measure for air quality impacts requires that “prior to the issuing of each building permit,” but after Project approval, the project applicant “provide plans and specifications to the City that demonstrate electrical service is provided to each of the areas in the vicinity...” (DEIR, p. S-10). Similarly, as a potential mitigation measure to address impacts to biological resources, the DEIR would require that “prior to the issuance of grading permits,” but after Project approval, “the Property Owner/Developer shall provide the City with proof of retention of a qualified biologist to implement this mitigation measure.” (DEIR, p. S-13). Similarly, the DEIR suggests mitigating any impacts to cultural resources by requiring that the project applicant retain a “professional archaeologist,” after project approval, but “prior to issuance of a grading permit.” (DEIR, p. S-19). Notably, the DEIR does not sufficiently analyze the impacts that said paleontologist would eventually be required to evaluate pursuant to this mitigation measure. Further, the DEIR also

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proposes a similar mitigation measure for impacts regarding geology and soils because it requires the Project application to retain “a qualified Paleontologist to observe grading activities,” after project approval, but “prior to issuance of grading permits and/or action that would permit Project site disturbance.” (DEIR, p. S-24). Lastly, the project proposes mitigating any significant impacts from GHG emissions by requiring that the applicant “shall design and build *future* non-residential to meet” certain requirements, but notably after Project approval. (DEIR, p. S-26) (emphasis added).

The postponement of these mitigation measures, and their corresponding analyses, denies the public and the City’s decisionmakers the opportunity to assess the adequacy of analyses to be conducted, and the Project’s overall impact on various environmental media. Indeed, because of this deferment, coupled with the lack of clarity in the DEIR regarding environmental impacts, the City’s decisionmakers may be denied the opportunity to fully consider the scope of the Project’s impacts to these environmental media and whether such impacts have been adequately mitigated, while the general public has also been denied the opportunity to assess and comment upon the associated impacts and the adequacy of the mitigation plans.

Thus, the City has failed to meet CEQA’s preconditions and requirements concerning mitigation, as the DEIR has failed to show why the Project’s mitigation measures, and a comprehensive analysis of the Project’s anticipated environmental impacts, cannot be completed or achieved at this time prior to adoption of the EIR. The deferment of this study and analysis also improperly constrains the DEIR’s assessment of the impacts that the measure will have individually or cumulatively, and the specific performance criteria the Applicant will have to meet with regard to the measures. Accordingly, the proposed mitigation measures are improperly deferred because they defer the formulation of components of the mitigation to a later time and further does not explain how the measures will clearly reduce the Project’s environmental impacts to a level of insignificance.

2. The DEIR Fails to Consider and Deploy All Feasible Mitigation Measures

A fundamental purpose of an EIR is to identify ways in which a proposed project's significant environmental impacts can be mitigated or avoided. Pub. Res. Code §§ 21002.1(a), 21061. To implement this statutory purpose, an EIR must describe any

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feasible mitigation measures that can minimize the project's significant environmental effects. PRC §§ 21002.1(a), 21100(b)(3); CEQA Guidelines §§ 15121(a), 15126.4(a).

If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” PRC §§ 21002; 21002.1, 21081.

Mitigation measures, under CEQA proposed and adopted, are required to describe what actions will be taken to reduce or avoid an environmental impact. (CEQA Guidelines § 15126.4(a)(1)(B) [providing “[f]ormulation of mitigation measures should not be deferred until some future time.”].) While the same Guidelines section 15126.5(a)(1)(B) acknowledges an exception to the rule against deferrals, such exception is narrowly proscribed to situations where it is impractical or infeasible to include those details during the project's environmental review.

According to CEQA Guidelines, “[w]hen an EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment.” CEQA Guidelines Section 15096(g)(2).

However, an impact can only be labeled as significant-and-unavoidable after all available, feasible mitigation is considered and the EIR lacks substantial evidence to support a finding that no other feasible mitigation existed to mitigate the Project’s significant impacts.

3. The DEIR Improperly Mischaracterizes Mitigation Measures as “Project Design Features”

The DEIR improperly labels mitigation measures as “Project Design Features” or “PDFs,” which the DEIR purports will minimize any potentially significant environmental impacts.

Relying on the PDFs, the DEIR concludes in many instances that the Project’s impacts are less than significant and that no mitigation is required.

However, it is established that “[a]voidance, minimization and / or mitigation measure’ . . . are not ‘part of the project.’ . . . compressing the analysis of impacts and mitigation measures into a single issue . . . disregards the requirements of CEQA.”

(*Lotus v. Department of Transportation* (2014) 223 Cal. App. 4th 645, 656.)

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When “an agency decides to incorporate mitigation measures into its significance determination, and relies on those mitigation measures to determine that no significant effects will occur, that agency must treat those measures as though there were adopted following a finding of significance.” (*Lotus, supra*, 223 Cal. App. 4th at 652 [*citing* CEQA Guidelines § 15091(a)(1) and Cal. Public Resources Code § 21081(a)(1).])

By labeling mitigation measures as project design features, the City violates CEQA by failing to disclose “the analytic route that the agency took from the evidence to its findings.” (Cal. Public Resources Code § 21081.5; CEQA Guidelines § 15093; *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal. App. 3d 1022, 1035 [*quoting Topanga Assn for a Scenic Community v. County of Los Angeles* (1974) 11 Cal. 3d 506, 515.])

The DEIR’s use of “Project Design Features” further violates CEQA because such measures would not be included in the Project’s Mitigation Monitoring and Reporting Program CEQA requires lead agencies to adopt mitigation measures that are fully enforceable and to adopt a monitoring and/or reporting program to ensure that the measures are implemented to reduce the Project’s significant environmental effects to the extent feasible. (PRC § 21081.6; CEQA Guidelines § 15091(d).) Therefore, using Project Design Features in lieu of mitigation measures violates CEQA.

The DEIR is laden with mitigation measures that are improperly characterized as PDFs. The DEIR should be revised to adequately address and analyze impacts from any proposed mitigation measures.

4. *Similarly, the Project Improperly Relies on Model or Optional Rules that are Not Legally Enforceable or Binding Rather Than Mandatory Mitigation Measures*

CEQA Guidelines generally require that mitigation measures for significant impacts be mandatory or legally enforceable on a project applicant rather than permissive or voluntary. However, in several instances, the DEIR merely invokes model or optional rules that the project applicant *may* comply with to address potentially significant environmental impacts. For example, regarding mitigation of GHG emissions, the DEIR proposes incorporating “measures to reduce overall use of portable water within the building by 12%... as outlined [in] Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code.” Yet, these Measures are likely voluntary by the Project applicant whereas mitigation measures are typically

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mandatory. (DEIR, p. 4.8-20). Thus, the DEIR avoids requiring strict compliance with mandatory mitigation measures by instead requiring voluntary compliance with optional or model rules, potentially contravening the CEQA Guidelines.

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5. *DEIR Relies on Speculative Segmentation of Construction Phases that are Not Mandatory or Legally Enforceable*

Additionally, the DEIR relies on, and assumes that, the Project will be implemented via sequential construction phases, even though these phases are not mandatory or legally enforceable. For instance, it is conceivable that an earlier construction phase may be delayed due to unforeseen reasons, and therefore delay or impact subsequent phases. In that case, the DEIR's analysis of impacts and other project aspects would be brought into question because the construction phases it currently anticipates may not materialize as expected. As a potential resolution, the City should adopt a project schedule or description that is binding on the project applicant, specifically as to the timing and completion of each construction phase.

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C. *The DEIR Fails to Adequately Evaluate the Project's Cumulative Impacts.*

A DEIR must discuss cumulative impacts when they are significant and the project's incremental contribution is "cumulatively considerable." CEQA Guidelines §15130(a). A project's incremental contribution is cumulatively considerable if the incremental effects of the project are significant "when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." 14 Cal Code Regs §15065(a)(3).

An EIR must discuss a cumulative impact if the project's incremental effect combined with the effects of other projects is "cumulatively considerable." 14 C.C.R. §15130(a). This determination is based on an assessment of the project's incremental effects "viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." 14 C.C.R. §15065(a)(3)(emphasis added); *Banning Ranch Conservancy v City of Newport Beach* (2012) 211 CA4th 1209, 1228. See also 14 C.C.R. §15355(b).

The CEQA Guidelines require that an EIR implement the provisions of Pub. Res. Code §21083(b)(2), which specifies that the Guidelines must include criteria requiring

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public agencies to find that a project may have a significant effect on the environment if its possible effects “are individually limited but cumulatively considerable.”

The purpose of the cumulative impacts analysis is to avoid considering projects in a vacuum, because failure to consider cumulative harm may risk environmental disaster. *Whitman v. Board of Supervisors* (1979) 88 Cal.App.3d 397, 408 (citing *Natural Resources Defense Council v. Callaway* (2d Cir 1975) 524 F2d 79). Without this analysis, piecemeal approval of several projects with related impacts could lead to severe environmental harm. *Golden Door Props., LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 527; *San Joaquin Raptor/Wildlife Rescue Ctr. v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 720; *Las Virgenes Homeowners Fed’n v County of Los Angeles* (1986) 177 Cal.App.3d 300, 306. An adequate analysis of cumulative impacts is particularly important when another related project might significantly worsen the project’s adverse environmental impacts. *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 CA4th 859.

CEQA mandates that a project’s impacts be evaluated in a holistic context, including impacts from other nearby projects. While the DEIR currently acknowledges other “related projects,” it contains little to no analysis on their independent impacts, and therefore little to no analysis on any potential cumulative impacts as required by CEQA. Thus, the DEIR contains insufficient evidence regarding the Project’s cumulative impacts, especially in light of other nearby projects. Without an adequate analysis of cumulative impacts as required by CEQA, the public’s ability to understand and meaningfully address such impacts is significantly undermined. The DEIR should be revised to adequately address the Project’s cumulative impacts, with careful regard and analysis of impacts stemming from other nearby projects.

Despite the wide scope of significant impacts presented by the Project both individually and cumulatively, the DEIR contains no reference to or consideration whatsoever of nearby past development projects (as required by 14 C.C.R. §15065(a)(3)) that have already been completed. Further, the DEIR may omit a number of previously completed large-scale projects within the 6-mile radius of the Project, and therefore their associated environmental impacts.

These significant omissions taint and effectively undermine the validity of much of the cumulative impacts analysis set forth in the DEIR. Indeed, the failure to consider these previously-completed, significant, large-scale, industrial development projects in the immediate vicinity of the proposed Project calls into question the DEIR’s cumulative impacts analysis in various impact categories. The DEIR must now be revised with

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respect to each of the foregoing impact categories (and potentially others) to incorporate any significant past projects within the 6-mile cumulative projects radius in its cumulative impacts analysis. Absent such revision, the DEIR in its current form violates CEQA and cannot permissibly be certified by the City.

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D. *The Project is Inconsistent and in Conflict with Land Use Plans for the Project Site, including the General Plan, Housing Element, etc.*

Each California city and county must adopt a comprehensive, long-term general plan governing development. *Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy, and serves as a “constitution” or “charter” for all future development. *DeVita v. County of Napa* (1995) 9 Cal.4th 763, 773; *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531, 540.

General plan consistency is “the linchpin of California’s land use and development laws; it is the principle which infused the concept of planned growth with the force of law.” *Debottari v. Norco City Council* (1985) 171 Cal.App.3d 1204, 1213. It is well established that development projects may not be approved if they interfere with, or frustrate, the general plan’s policies and objectives. *See Napa Citizens*, 91 Cal.App.4th at 378-79; *see also, Lesher*, 52 Cal.3d at 544. Thus, CEQA requires EIRs to analyze the consistency of a project with the general plan. CEQA Guidelines § 15125(d); *see also, Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Sup’rs* (1998) 62 Cal.App.4th 1332, 1336. Because an EIR must analyze inconsistencies with the general plan, deficiencies in the plan may affect the legal adequacy of the EIR. If the general plan does not meet state standards, an EIR analysis based on the plan may also be defective.

CEQA also mandates “good faith effort in full disclosure.” Guidelines § 15204. An agency is not acting in good faith when “it gives conflicting signals to decision makers and the public about the nature and scope of the activity being proposed.” *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655–656.

Here, despite the importance of ensuring that the Project is consistent with the General Plan, as noted above, the DEIR fails to support its consistency finding with substantial evidence as required. (CEQA Guidelines § 15384 [requiring agency findings be supported by substantial evidence, i.e. “enough relevant information and

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reasonable inferences from this information that a fair argument can be made to support a conclusion”)).

Specifically, although the DEIR acknowledges that the Project seeks to modify various land use plans relating to the Project site, the DEIR overall fails to analyze eligibility for these proposed modifications and instead offers only conclusory statements.

These blanket statements are inadequate because the Project cannot rely upon approval of its requested changes to conclude that the Project is consistent with the General and Specific Plans given that approval of the changes has not yet occurred and is speculative at this stage. Simply put, there is a logical disconnect in the finding that future amendments establish that the Project is consistent with the existing plans absent some sort of analysis or explanation as to why the future change is consistent and warranted. In the words of the Court, “The Planning and Zoning Law does not contemplate that general plans will be amended to conform to zoning ordinances. The tail does not wag the dog. The general plan is the charter to which the ordinance must conform.” *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 389.

Thus, the DEIR’s land use consistency analysis is not supported by substantial evidence and is based on the flawed assumption that general plan consistency can be achieved by amending the General Plan itself. The DEIR must be revised to provide sufficient analysis and good faith disclosures about the General Plan inconsistencies as well as mitigate the impacts of the acknowledged land use inconsistencies before any Project approvals occurred.

E. *The DEIR Improperly Relies on Future Compliance with Regulatory Standards to Support its Findings Regarding Lack of Significant Impacts*

In many instances, the DEIR relies on downstream and speculative compliance with various regulatory rules and standards to support its conclusory determinations, including as to significant impacts. However, “[c]ompliance with the law is not enough to support a finding of no significant impact under . . . CEQA.” (*Californians for Alternatives to Toxics v. Department of Food & Agriculture* (2005) 136 Cal. App. 4th 1, 15 – 17 [finding that a lead agency “abused its discretion by relying on DPR’s regulatory

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scheme as a substitute for performing its own evaluation of the environmental impacts of using pesticides.”].).

As the Court noted in *East Sacramento Partnerships for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 301, compliance with a regulatory scheme “in and of itself does not insulate a project from the EIR requirement, where it may be fairly argued that the project will generate significant environmental effects.” (Internal quotations omitted.) A project's effects can be significant even if they are not greater than those deemed acceptable in a general plan or other regulatory law. (*Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1416; *see also Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 732 (finding that a full environmental impact report is required “if substantial evidence supports a fair argument that the Project may have significant unmitigated noise impacts, even if other evidence shows the Project will not generate noise in excess of the County's noise ordinance and general plan.”))

A public agency cannot apply a threshold of significance or regulatory standard “in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.” (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 342.)

An agency must “explain how the particular requirements of that environmental standard reduce project impacts, including cumulative impacts, to a level that is less than significant, and why the environmental standard is relevant to the analysis of a project that is less than significant.” CEQA Guidelines § 15067.7.

Furthermore, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

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The City should require that the DEIR be revised to avoid over relying on purported compliance with regulatory requirements to achieve necessary mitigation.

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VI. CONCLUSION

Based on the foregoing concerns, the City should require revision and recirculation of the DEIR for the Project pursuant to CEQA. Absent doing so, the DEIR in its current form may violate CEQA in multiple respects.

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If the City should have any questions or concerns, please do not hesitate to contact this office.

Sincerely,

Omar Corona
Attorneys for Western States Regional
Council of Carpenters

Attachments:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);
Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and
Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

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EXHIBIT A



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."¹ CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.²

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.³

¹ "California Emissions Estimator Model." CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

² "California Emissions Estimator Model." CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

³ "CalEEMod User's Guide." CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

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Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled (“VMT”) associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.⁴

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

$$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$$

Where:

n = Number of land uses being modeled.”⁵

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

$$\text{Emissions}_{\text{pollutant}} = VMT * EF_{\text{running,pollutant}}$$

Where:

Emissions_{pollutant} = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

EF_{running,pollutant} = emission factor for running emissions.”⁶

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.⁷ In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act (“CEQA”) requires that such changes be justified by substantial evidence.⁸ The default number of construction-related worker trips is calculated by multiplying the

⁴ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.

⁵ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.

⁶ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

⁷ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

⁸ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 9.



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number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.⁹ Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively.”¹⁰ Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.¹¹ The operational home-to-work vehicle trip lengths are:

“[B]ased on the location and urbanization selected on the project characteristic screen. These values were supplied by the air districts or use a default average for the state. Each district (or county) also assigns trip lengths for urban and rural settings” (emphasis added).¹²

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).¹³

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

⁹ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

¹⁰ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

¹¹ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

¹² “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

¹³ “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.



As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.¹⁴ In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,623
Amortized Construction GHG Emissions (MT CO ₂ e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,024
Amortized Construction GHG Emissions (MT CO ₂ e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

¹⁴ "Appendix D Default Data Tables." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.



Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

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Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

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Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

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Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

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Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

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Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

Attachment B

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed) Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

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9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1386	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3.896.0732	3.896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.46
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2287
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2287
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4086	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.6291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.6291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004	3.3200e-003	3.3200e-003	3.3200e-003	3.0500e-003	3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004	3.3200e-003	3.3200e-003	3.3200e-003	3.0500e-003	3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620,498 6	7,620,498 6	0.3407	0.0000	7,629,016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620,498 6	7,620,498 6	0.3407	0.0000	7,629,016 2

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartment Low Rise	145.75	154.25	154.00	506,227	506,227
Apartment Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e +006	506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8776	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e +006	506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8776	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.6200e-003	62.6482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.6200e-003	62.6482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.65	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit- Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.65	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit- Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed) Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2789	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.1816	76,811.1816	2.8282	0.4832	77,025.8786

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.1816	76,811.1816	2.8282	0.4832	77,025.8786

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.46
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292,241.3	1,292,241.3	0.0877		1,294,433.7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463,056.8	1,463,056.8	0.0927		1,465,375.0

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944.9	3,747.944.9	1.0549		3,774.317.4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944.9	3,747.944.9	1.0549		3,774.317.4

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292,241.3	1,292,241.3	0.0877		1,294,433.7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463,056.8	1,463,056.8	0.0927		1,465,375.0

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

3.5 Building Construction - 2022

Unmitigated Construction On-Site

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

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	28.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2428		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1806	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartment Low Rise	145.75	154.25	154.00	506,227	506,227
Apartment Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartment Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartment Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartment Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.983 7	8,355.983 2		0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.983 2	8,355.983 2		0.1602	0.1532	8,405.638 7

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4796	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed) Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.46
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269,855	1,269,855	0.0908		1,272,125
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160,8377	160,8377	4.7300e-003		160,9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430,693	1,430,693	0.0955		1,433,081

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747,944	3,747,944	1.0549		3,774,317
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747,944	3,747,944	1.0549		3,774,317

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269,855.5	1,269,855.5	0.0908		1,272,125.2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160,837.7	160,837.7	4.7300e-003		160,956.0
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430,693.2	1,430,693.2	0.0955		1,433,081.2

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685,656.9	3,685,656.9	1.1920		3,715,457.3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685,656.9	3,685,656.9	1.1920		3,715,457.3

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

3.5 Building Construction - 2022

Unmitigated Construction On-Site

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

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.8658
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.8658
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671,400 7	3,671,400 7	0.2096		3,676,641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983,731 8	7,983,731 8	0.2055		7,988,968 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555,209 9	2,555,209 9	0.6079		2,570,406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555,209 9	2,555,209 9	0.6079		2,570,406 1

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.968 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545,286 0	1,545,286 0	0.0376		1,546,226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545,286 0	1,545,286 0	0.0376		1,546,226 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545,286 0	1,545,286 0	0.0376		1,546,226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545,286 0	1,545,286 0	0.0376		1,546,226 2

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083	47,917.8005	47,917.8005	2.1953			47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083	47,917.8005	47,917.8005	2.1953			47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartment Low Rise	145.75	154.25	154.00	506,227	506,227
Apartment Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartment Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartment Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartment Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.9837	8,355.9832		0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.9832	8,355.9837		0.1602	0.1532	8,405.6387

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4796	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed) Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2650	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.6300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2650	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.6300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

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9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1386	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3.896.0732	3.896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.46
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5283
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5283
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004	3.3200e-003	3.3200e-003	3.3200e-003	3.0500e-003	3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004	3.3200e-003	3.3200e-003	3.3200e-003	3.0500e-003	3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartment Low Rise	145.75	154.25	154.00	506,227	506,227
Apartment Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartment Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartment Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartment Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e +006	506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8776	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e +006	506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8776	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.6200e-003	62.6482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.6200e-003	62.6482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.65	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit- Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.65	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit- Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed) Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7656	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7656	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.1816	76,811.1816	2.8282	0.4832	77,025.8786

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.1816	76,811.1816	2.8282	0.4832	77,025.8786

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.46
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292,241 3	1,292,241 3	0.0877		1,294,433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117,2799	117,2799	3.5200e-003		117,3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409,521 2	1,409,521 2	0.0912		1,411,801 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747,944 9	3,747,944 9	1.0549		3,774,317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747,944 9	3,747,944 9	1.0549		3,774,317 4

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.5212	1,409.5212	0.0912		1,411.8015

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

3.5 Building Construction - 2022

Unmitigated Construction On-Site

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

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4259	1.5074	21.0801	0.0607	6.0832	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0832	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1528		5,826.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1528		5,826.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartment Low Rise	145.75	154.25	154.00	506,227	506,227
Apartment Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartment Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartment Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartment Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.9832	8,355.9832		0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.9832	8,355.9832		0.1602	0.1532	8,405.6387

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4796	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed) Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3839	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3839	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.46
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269,855.5	1,269,855.5	0.0908		1,272,125.2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380,326.2	1,380,326.2	0.0941		1,382,679.1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269,855.5	1,269,855.5	0.0908		1,272,125.2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380,326.2	1,380,326.2	0.0941		1,382,679.1

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685,656.9	3,685,656.9	1.1920		3,715,457.3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685,656.9	3,685,656.9	1.1920		3,715,457.3

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

3.5 Building Construction - 2022

Unmitigated Construction On-Site

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

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602		5,696.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,696.9408
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.0104	9,481.0104	0.3984		9,490.9691

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671,400 7	3,671,400 7	0.2096		3,676,641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483,797 4	5,483,797 4	0.1442		5,487,402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155,198 1	9,155,198 1	0.3538		9,164,043 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555,209 9	2,555,209 9	0.6079		2,570,406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555,209 9	2,555,209 9	0.6079		2,570,406 1

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671,400 7	3,671,400 7	0.2096		3,676,641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0832	0.0479	6.1411	1.6163	0.0441	1.6604		5,483,797 4	5,483,797 4	0.1442		5,487,402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155,198 1	9,155,198 1	0.3538		9,164,043 7

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207,584 1	2,207,584 1	0.7140		2,225,433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207,584 1	2,207,584 1	0.7140		2,225,433 6

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1806	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083	47,917.80 05	47,917.80 05	2.1953			47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083	47,917.80 05	47,917.80 05	2.1953			47,972.68 39

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartment Low Rise	145.75	154.25	154.00	506,227	506,227
Apartment Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartment Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartment Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartment Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.9837	8,355.9832		0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292	8,355.9832	8,355.9837		0.1602	0.1532	8,405.6387

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8684
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4796	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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(CONT.)



Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
<i>% Decrease in Construction-related GHG Emissions</i>	<i>17%</i>

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EXHIBIT B



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report



Technical Consultation, Data Analysis and
Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

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Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisnoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*. Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisnoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisnoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

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Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9), 171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellev, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS-6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

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Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States” Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.



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Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Floral, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

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(CONT.)



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Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

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Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

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Deposition and/or Trial Testimony:

- In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019
- In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”
Defendant.
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19
- In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018
- In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017
- In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017
- In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017
- In The Superior Court of the State of California, For The County of Los Angeles
Warn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018
- In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

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Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

- In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017
- In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015
- In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015
- In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015
- In The Iowa District Court For Wapello County
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015
- In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015
- In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward
DeRuyter, Defendants
Rosenfeld Deposition: July 2015
- In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015
- In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014
- In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City
Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

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Town Center at Moreno Valley Specific Plan Final Environmental Impact Report

In the County Court of Dallas County Texas

Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.

Case Number cc-11-01650-E

Rosenfeld Deposition: March and September 2013

Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio

John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*

Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)

Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division

Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.

Case 3:10-cv-00622

Rosenfeld Deposition: February 2012

Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland

Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants

Case Number: 03-C-12-012487 OT

Rosenfeld Deposition: September 2013

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EXHIBIT C



Town Center at Moreno Valley Specific Plan Final Environmental Impact Report



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 – 2003);

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- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.



- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

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- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.



- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.



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Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.



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Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

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Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.



Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

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RESPONSES TO COMMENT LETTER G:

Mitchell M. Tsai Law Firm (on behalf of Western States Regional Council of Carpenters)

- G-1 This comment summarizes the proposed Project description and introduces the Western States Regional Council of Carpenters (Western Carpenters) and notes that members of the Western Carpenters live, work and recreate in the City and surrounding communities. The comment states that the commenter reserves the right to supplement these comments at or before hearings on the Project, and requests notification of all future notices issued under CEQA regarding the Project. The commenter has been added to the City's list for future public notices regarding the proposed Project as requested.

This comment also incorrectly identifies that there was a prior Mitigated Negative Declaration and Environmental Impact Report for the Project. There has been no prior Project-specific analysis conducted for the proposed TCMV Specific Plan.

This comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.

- G-2 This comment requests the City require the Project to utilize local workers meeting certain apprenticeship requirements to build the proposed development. This comment asserts that local hire and skilled and trained workforce requirements can provide community benefits, improve the jobs-housing balance, help reduce environmental impacts associated with worker/vendor trips and vehicular emissions, and provide local economic benefits (i.e., short-term construction jobs for local workers). The comment also discusses that other jurisdictions have tied local hire and other workforce policies to local development permits to address transportation issues (e.g., City of Berkeley). The comment also refers to an attachment to the comment letter identified as Exhibit A, which is a March 8, 2021, SWAPE letter to Mitchell M. Tsai re. Local Hire Requirements and Considerations for Greenhouse Gas Modeling. Refer to response to comment G-21, which addresses the attachments to the comment letter.

The Draft EIR includes analyses regarding the Project's impact on GHG emissions, air quality, and transportation. Regarding transportation impacts, the Draft EIR determined that transportation impacts, including VMT impacts, would be less than significant. Further, as discussed in Draft EIR Section 4.14, Population and Housing, it is anticipated that general construction labor would be available from the local and regional labor pool as suggested by the comment. As discussed in CEQA Guidelines Section 15126.4(a)(3), CEQA does not require mitigation measures for effects determined to be less than significant.

The Project's air quality impacts during construction were analyzed in Draft EIR Section 4.3, and GHG emissions impacts were analyzed in Draft EIR Section 4.8, Greenhouse Gas Emissions. As discussed, the Project's construction-related emissions are anticipated to exceed the established South Coast Air Quality Management District (SCAQMD) regional thresholds of significance for volatile organic compounds (VOC) primarily due to emissions associated with architectural coatings (not vehicular trips). The total amount of Project-related GHG emissions from direct and indirect sources combined would exceed the SCAQMD recommended interim screening threshold of 3,000 MTCO₂e per year, which is used for



purposes of the Draft EIR analysis. However, as with air quality, these emissions are not due to vehicular trips during construction but are primarily associated with operations; construction emissions are estimated to be 147.43 MTCO_{2e} per year, which would be less than significant. As discussed in the Draft EIR, the Project would be required to implement air quality and GHG mitigation measures to reduce emissions, including during construction activities. In addition, the Project is in proximity to transit facilities, including site adjacent bus stops that would facilitate workers using transit to access the Project site during construction.

The Project would not result in construction-related air quality or GHG emissions impacts associated with vehicular trips during construction, as such, the commenter's suggested mitigation in the form of employing local construction workers would not materially alter Project-related air quality or GHG emissions or change the conclusions in the Draft EIR. Further, while the Project and the City do not have the ability to regulate vehicle emissions, state and federal regulations will continue to improve engine efficiency and thus emissions. California has set a goal of requiring all new vehicles sold in 2035 and beyond to be zero-emission vehicles. Therefore, as vehicle emissions decrease in the future, air quality and GHG impacts associated with the Project would also decrease.

- G-3 This comment raises concerns regarding the COVID-19 pandemic and the potential for Project-related construction activities to create a public health risk for construction workers. The comment cites materials from 2020 and recommends the City incorporate additional training and other requirements to prevent the spread of COVID-19 and other infectious diseases during construction activities. The comment recommends measures related to construction site design, testing procedures, response plans, and worker safety training to reduce COVID-19 risk.

Effects of the environment on a project are not subject to CEQA review (Public Resources Code Sections 21065 and 21068). The effects the existing environment might have on proposed projects are generally not treated as changes in the physical environment under CEQA (*California Bldg. Indus. Assn. v. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369, 378 (2015)). CEQA does not require analysis of impacts that existing environmental conditions might have on a project, its residents, or its users, except when required by specific statutory exception. Therefore, the City does not have to analyze the impact of COVID-19, an existing condition, on the Project. Moreover, in the absence of any applicable methodology, such an analysis would be speculative.

Nonetheless, the City recognizes the unprecedented nature of COVID-19 and the potential public health impacts associated with it. It is acknowledged that the Governor of California, Gavin Newsom, terminated the State's COVID-19 State of Emergency on March 1, 2023. However, any projects being constructed during a period of time in which emergency measures or orders are in place would be required to adhere to the Center for Disease Control and Prevention's (CDC) workplace guidelines for construction workers. Adherence to these measures would ensure that potential health impacts during the period of time in which emergency measures or orders are in place would be minimized during construction. Furthermore, any projects being developed are required to adhere to the applicable City of Moreno Valley and County of Riverside workplace guidelines at the time of groundbreaking. No revisions to the Draft EIR analysis are required.



- G-4 This comment suggests that the City should enter into a Development Agreement with the Project Applicant to secure additional community benefits (including local hire and apprenticeship requirements) and additional environmental mitigation. California Planning and Zoning Law and specifically, Government Code section 65864 et seq. governs the authority and contents of development agreements. While the City has the authority to enter into a Development Agreement, and a project applicant has the option to request one, a Development Agreement is voluntary. A Development Agreement is not required for the Project. Development pursuant to the TCMV Specific Plan would result in a mixed-use community with up to 800 dwelling units, commercial, civic, and open space uses as envisioned by the City. As such, consistent with the commenter's suggestion, the Project already includes substantial community benefits. Further, with regard to environmental mitigation, the Draft EIR identifies and includes mitigation measures to address the Project's potential environmental impacts, consistent with the requirements of CEQA. These mitigation measures are set forth in the MMRP (refer to Section 4.0 of this document). No revisions to the Draft EIR analysis are required.
- G-5 This comment discusses general information regarding CEQA and the commenter's understanding regarding preparation of EIRs including when an EIR should be prepared, and CEQA's requirements for environmental analysis and reducing environmental impacts. Several court cases are cited. The comment also describes the commenter's understanding of the standard of review that courts apply to determine the sufficiency of an EIR. The comment states that an EIR must include sufficient information so that foreseeable impacts can be understood and the public can comment on them. The comment also describes its view of the "fair argument" standard and when it is to be applied.

The comment's general description of CEQA's goals and requirements is noted. With respect to when an EIR should be prepared, an EIR has been prepared for the Project that is compliant with CEQA. With respect to the description of the standard of review applicable to a court's review of the sufficiency of an EIR, the City notes that an EIR's adequacy with respect to, for example, methodology, baseline conditions, scope of environmental impact analysis, and adequacy of mitigation measures is reviewed under the substantial evidence standard. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435; *Mission Bay All. v. Office of Cmty. Inv. & Infrastructure* (2016) 6 Cal.App.5th 160, 192, 206; CEQA Guidelines §15384(a). Disagreements among experts do not invalidate an EIR, and the lead agency may adopt the environmental conclusions reached by the experts that prepared the EIR, even though others may disagree with the underlying data, analysis, or conclusions. *Laurel Heights Improvement Assn. v. Regents of Univ. of California* (1988) 47 Cal.3d 376, 407-08. "To the extent factual questions (such as the agency's decision which methodologies to employ for analyzing an environmental effect) predominate, a substantial evidence standard of review will apply." *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 330-331. Only with respect to questions about whether the agency complied with the legal requirements of CEQA is the agency's action reviewed under a less deferential standard to determine whether the agency failed to proceed in a manner required by law. (Pub. Res. Code Section 21168.5)



No comment was made specific to the Project, or the adequacy and completeness of the Draft EIR.

- G-6 This comment refers to the CEQA Guidelines regarding the standard for recirculation and expresses the commenter's opinion that recirculation of the Draft EIR is required. As presented in the responses to comments above and below, the findings and conclusions of the Draft EIR are not affected by any of the comments contained herein. Therefore, there are no changes or revisions to the Draft EIR that would require recirculation of the Draft EIR. Specific comments provided by the commenter regarding the Draft EIR are provided and responded to below. The Draft EIR is comprehensive, and none of the circumstances requiring recirculation of a Draft EIR set forth in CEQA Guidelines Section 15088.5 have been met.
- G-7 The comment makes various general statements regarding an EIR's analysis of potentially significant impacts and requirements to eliminate or lessen the impacts and cites to various legal cases. This comment also suggests that the Draft EIR fails to comply with the identified CEQA requirements based on the subsequent comments provided in the comment letter. Responses to the referenced comments are provided below (see responses to comment G-8 through G-10 below).
- G-8 This comment suggests that while the Draft EIR acknowledges that the Project would have significant impacts on air quality, it "fails to describe with sufficient specificity how the Project would contribute to exceeding those thresholds, and further fails to provide sufficient analysis regarding the sources of those emissions. (DEIR, p. S-10)." This comment is citing the summary section of the Draft EIR, which is not intended to or required to provide the level of detail suggested in this comment. A detailed analysis of the Project's air quality impacts is appropriately provided in Draft EIR Section 4.3, Air Quality, and Draft EIR Technical Appendix B, which is summarized in the Draft EIR section. Draft EIR Section 4.3 clearly identifies the sources of criteria pollutant emissions resulting from the Project's construction activities and operations. Notably, with respect to the Project's significant and unavoidable air quality impacts, Draft EIR Section 4.3, Air Quality, identifies operational emissions would be expected from the following primary sources: area source emissions, energy source emissions, and mobile source emissions, as further described in Section 5.4 of the Air Quality Impact Analysis included in Draft EIR Technical Appendix B. The Draft EIR also identifies that the majority of the Project's operational emissions are from mobile sources (passenger car and truck vehicle trips generated by the Project). Draft EIR Section 4.3, Air Quality, further identifies with implementation of mitigation measures MM 4.3-2 through MM 4.3-6, the Project's operational related VOC, NO_x, and CO emissions would be reduced, but not to a level below SCAQMD's regional thresholds for these criteria pollutants. As explained in the Draft EIR, since the majority of the operational emissions are from vehicle trips and neither the Project Applicant nor the City have regulatory authority to control tailpipe emissions, no feasible mitigation measures beyond the measures identified exist that would reduce emissions to levels that are less than significant. Therefore, the Project would result in a significant and unavoidable cumulatively considerable net increase of a criteria pollutant for which the Project region is nonattainment under an applicable federal or State ambient air quality standard. No further analysis or information with respect to this issue is required.



- G-9 This comment incorrectly asserts that: the Draft EIR only cursorily evaluates the Project's potential GHG emissions impacts; the Draft EIR does not provide a comprehensive analysis of the Project's potential GHG emissions; and the Draft EIR does not provide a thorough breakdown of how the Project GHG emissions were calculated. On the contrary, GHG emissions were comprehensively evaluated in the Draft EIR consistent with the requirements of CEQA.

When noting the Draft EIR conclusions, the commenter refers only to the Draft EIR Executive Summary and neglects to cite extensive detailed discussion of Project GHG emissions presented in Draft EIR Section 4.8, Greenhouse Gas Emissions, and appended supporting technical analysis (Draft EIR Appendix G, Greenhouse Gas Analysis, GHGA).

The commenter cites various CEQA Guidelines sections addressing qualitative and quantitative methodologies for evaluating GHG emissions impacts. The City is aware of CEQA Guidelines GHG qualitative and quantitative analytic methodologies. Relevant CEQA Guidelines direction is specifically acknowledged in Draft EIR Section 4.8, Greenhouse Gas Emissions, and within the GHGA included in Draft EIR Appendix G.

The commenter also suggests incorrectly that the "DEIR does not rely on any quantitative analysis" in evaluation of the Project's compliance with numerical GHG emissions thresholds, and instead "relies on the Project's purported consistency with various land use plans and regulatory schemes." First, the commenter appears to conflate quantified GHG impact significance criteria and GHG impact policy/plan significance criteria used by the City for this Project. The City has determined that each of the CEQA threshold criteria establish a separate and independent basis upon which to substantiate the significance of the Project's potential GHG emissions impacts.

Project GHG Emissions in Context of Numeric Thresholds

Quantified Project GHG emissions in context of applicable numerical thresholds is presented in the Draft EIR Section 4.8, Greenhouse Gas Emissions. Detailed modeling and quantification of Project GHG emissions in the context of applicable numerical thresholds is presented in the GHGA Section 5.3 (Construction Emissions), GHGA Section 5.4 (Operational Emissions), and GHGA Appendix 5.1 (CalEEMod Annual Emissions Model Outputs). All GHG emissions quantification and analyses have been prepared by accredited professionals with extensive background in CEQA greenhouse gas analyses.

The City of Moreno Valley and the Project site are located within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) is the CEQA responsible agency for review and assessment of GHG analyses for developments in the Basin. All Draft EIR GHG analyses comply with accepted methodologies and protocols established by the SCAQMD. In combination, the Draft EIR and GHGA provide detailed quantified Project GHG emissions and present those emissions in context of applicable numeric thresholds.



Project GHG Emissions in Context of GHG Reduction Plans and Policies

GHG emission reduction plans and policies applicable to the Project and Draft EIR analyses comprise plans and policies articulated in the adopted 2006 City of Moreno Valley General Plan, the previously adopted 2040 General Plan, Connect SoCal 2024, and the California Air Resources Board (CARB) 2022 Scoping Plan. Project consistency with these plans and policies is substantiated in detail in the Draft EIR Section 4.8, Greenhouse Gas Emissions, and the GHGA included in Draft EIR Appendix G. The commenter is referred also to correlating discussions presented at Draft EIR Section 4.11 (Land Use and Planning), Draft EIR Section 4.14 (Population and Housing), and Draft EIR Section 4.16 (Transportation).

As such, contrary to the commenter's assertions, the Draft EIR does not inappropriately rely "on purported consistency with various land use plans and regulatory schemes" in determination of the Project's GHG impact significance.

This comment also summarizes various CEQA Guidelines sections addressing GHG emissions analyses in context of adopted GHG emissions reduction plans (e.g., Climate Action Plans), and CEQA direction regarding development and implementation of GHG reduction plans. Accompanying footnote citations are also provided in the comment (commenter footnotes 10, 11). The comment summarizes features of effective GHG reduction plans, and beneficial aspects of plan implementation. The City is aware of CEQA Guidelines direction regarding GHG emissions analyses in context of adopted GHG emissions reduction plans, and CEQA direction regarding development and implementation of GHG reduction plans such as a Climate Action Plan (CAP). As discussed in the Draft EIR Section 4.8, Greenhouse Gas Emissions, and the GHGA included in Draft EIR Appendix G, the City of Moreno Valley is in the process of developing a CAP. At present, there is no adopted City CAP allowing for comparative evaluation of the Project's GHG emissions. Accordingly, the Draft EIR does not rely on CAP compliance in determination of Project GHG emissions policy/plan consistency. Because the Draft EIR does not rely on CAP compliance in determination of Project GHG policy/plan impact significance, there is no "analytical gap" as asserted by the commenter. As noted previously, Project consistency with applicable GHG emissions reduction plans and policies is substantiated in detail in the Draft EIR Section 4.8, Greenhouse Gas Emissions, and the GHGA included in Draft EIR Appendix G.

In addition to the general discussion regarding CAPs, the comment also incorrectly infers that the Draft EIR conclusions regarding the Project GHG impact significance are based solely on determination of Project compliance with a GHG reduction plan. The basis for determining the Project's GHG emissions impact significance is clearly delineated in Draft EIR Section 4.8, Greenhouse Gas Emissions. As discussed in the Draft EIR, quantified Project GHG emissions exceeding the SCAQMD 3,000 MTCO₂e/year numeric threshold would be potentially significant. Quantified Project GHG emissions in context of applicable numerical thresholds is summarized in Draft EIR Section 4.8, Greenhouse Gas Emissions. Detailed modeling and quantification of Project GHG emissions in the context of applicable numerical thresholds is presented in the GHGA included in Draft EIR Appendix G (GHGA Section 5.3 [Construction Emissions], GHGA Section 5.4 [Operational Emissions], and GHGA Appendix 5.1 [CalEEMod Annual Emissions Model Outputs]). The Draft EIR analysis substantiates that



even with application of mitigation, quantified Project GHG emissions would exceed the applicable SCAQMD numeric threshold. Accordingly, as disclosed in the Draft EIR Section 4.8, Greenhouse Gas Emissions, quantified Project GHG emissions impacts would be individually and cumulatively significant and unavoidable.

With regard to Project consistency with applicable GHG reduction plans and policies, relevant plans and policies comprise those presented in the adopted 2006 City of Moreno Valley General Plan, the previously adopted 2040 General Plan, Connect SoCal SoCal 2024, and the CARB 2022 Scoping Plan. Project consistency with GHG reduction plans and policies is substantiated in detail at Draft EIR Section 4.8, Greenhouse Gas Emissions, and GHGA included in Draft EIR Appendix G. Accordingly, the Project is determined to be consistent with applicable GHG reduction plans and policies. Impacts in this regard would therefore be individually and cumulatively less than significant. The commenter is referred also to correlating discussions presented at Draft EIR Section 4.11, Land Use and Planning; Draft EIR Section 4.14, Population and Housing; and Draft EIR Section 4.16, Transportation.

In summary, substantial evidence supporting the Draft EIR GHG analysis and conclusions includes:

- Detailed modeling and quantification of GHG emissions in Draft EIR Section 4.8 Greenhouse Gas Emissions, Table 4.8-3, Amortized Annual Construction Emissions Summary; Table 4.8-4, Project GHG Emissions – Without Mitigation; GHGA Section 5.3, Construction Emissions; GHGA Section 5.4, Operational Emissions; GHGA Appendix 5.1, CalEEMod Annual Emissions Model Outputs; and
- Discussion presented at Draft EIR Section 4.8, Greenhouse Gas Emissions; GHGA Section 5, Project Greenhouse Gas Analysis; GHGA Section 6, GHG Emissions Findings and Recommendations; and GHGA Appendix 5.1, CalEEMod Annual Emissions Model Outputs.

Based on analysis and evidence presented in the Draft EIR Section 4.8, Greenhouse Gas Emissions, the Lead Agency has appropriately concluded that even with application of mitigation, quantified Project GHG emissions impacts would exceed applicable numeric thresholds. Quantified Project GHG emissions impacts would therefore be individually and cumulatively significant and unavoidable. Based on analysis and evidence presented in the Draft EIR, the Lead Agency has appropriately concluded that the Project would not conflict with an applicable plan adopted for purposes of reducing GHG emissions. Project impacts in this regard would therefore be individually and cumulatively less than significant.

As discussed above, contrary to the commenter's suggestion, further GHG analysis is not required.

- G-10 The comment incorrectly asserts that the Draft EIR does not contain sufficient analysis of Project construction-source and operational-source diesel emissions impacts. With respect to operations, the Project does not propose significant operational sources of diesel particulate matter (DPM) emissions or other toxic air contaminants (TACs), such as freeways and high-traffic roads, distribution centers, warehouses, rail yards, ports, refineries, chrome platers, or



gasoline stations. Only diesel delivery trucks would be considered a TAC source, of which the mixed-use Project would generate a limited amount that would not result in a health risk at the nearby residential receptors.

With respect to construction-related air quality analysis stemming from diesel trucks and other diesel equipment, a Project-specific Construction Health Risk Assessment (HRA) was prepared, which confirms that the Project would result in a less than significant construction health risk impact and no mitigation would be required. Specifically, the Construction HRA concludes that without mitigation, at the maximally exposed individual receptor (MEIR), maximally exposed individual worker (MEIW), and maximally exposed individual school child (MEISC), the maximum incremental cancer risk attributable to Project construction-source DPM emissions would be less than the South Coast Air Quality Management District (SCAQMD) significance threshold of 10 in one million. The non-cancer risks were all calculated to be ≤ 0.01 , which would not exceed the applicable significance threshold of 1.0. The HRA is included in Appendix A to this Final EIR. Notwithstanding, Draft EIR MM 4.3-1 requires the use of Tier 4 Final equipment and implementation of MM 4.3-1 would provide the benefit of reducing DPM emissions from construction equipment and would therefore further reduce cancer and non-cancer risk. As identified in the Construction HRA, with implementation of Draft EIR MM 4-3.1, the maximum incremental cancer risk attributable to Project construction-source DPM emissions would be further reduced.

Further, as discussed in the Draft EIR Section 4.3, Air Quality, and Section 4.11, Land Use and Planning, and identified in Draft EIR MM 4.3-2, Project diesel emissions would be effectively controlled by mandated compliance with existing CARB anti-idling regulations. Compliance with existing CARB regulations ensures that potential effects of diesel emissions are maintained at levels that would be less than significant.

The comment provides no evidentiary support indicating that Project diesel-source emissions would somehow result in potentially significant impacts. Here, consistent with CEQA direction, the Draft EIR analysis of construction and operational-source emissions focuses on potentially substantial adverse effects of the Project, and not on effects that are clearly insignificant or speculative. By focusing on potentially significant effects, the Draft EIR avoids unnecessary expenditure of time and resources on effects that do not warrant detailed study. This aligns with CEQA's intent for efficient and effective environmental review.

This comment also summarizes estimated diesel fuel consumption of the Project. Environmental effects of Project energy consumption, including diesel fuel consumption, are addressed at Draft EIR Section 4.6, Energy, and Draft EIR Appendix E, Energy Analysis. The Draft EIR analysis substantiates that the Project would not result in any potentially significant impacts related to provision or consumption of energy. This includes potential effects associated with provision and consumption of diesel fuel.

As discussed above, contrary to the commenter's suggestion, air quality impacts related to diesel vehicles and equipment are properly disclosed and analyzed, and further analysis is not required.



- G-11 The comment makes various statements regarding requirements for the identification of mitigation measures to minimize a Project's significant environmental effects and cites various provisions of CEQA and the CEQA Guidelines as well as legal cases. This comment makes a general statement that the Draft EIR mitigation measures are inadequate based on the subsequent comments provided in the comment letter. Responses to the referenced comments are provided below (see responses to comment G-12 through G-15 below).
- G-12 This comment discusses deferred mitigation generally, outlines CEQA requirements relative to mitigation, and suggests that the Draft EIR mitigation measures are improperly deferred for various impact categories. The comment does not identify mitigation measures by number but appears to be referring to Draft EIR Mitigation Measures 4.3-3, 4.4-1, 4.5-1, 4.7-1, and 4.8-1. The mitigation measures identified in the Draft EIR have been developed in accordance with the requirements outlined in CEQA Guidelines Section 15097(c), which indicate that the public agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. The choice of program may be guided by the following:
- (1) Reporting is suited to projects which have readily measurable or quantitative mitigation measures or which already involve regular review. For example, a report may be required upon issuance of final occupancy to a project whose mitigation measures were confirmed by building inspection.
 - (2) Monitoring is suited to projects with complex mitigation measures, such as wetlands restoration or archeological protection, which may exceed the expertise of the local agency to oversee, are expected to be implemented over a period of time, or require careful implementation to assure compliance.
 - (3) Reporting and monitoring are suited to all but the most simple projects. Monitoring ensures that project compliance is checked on a regular basis during and, if necessary after, implementation. Reporting ensures that the approving agency is informed of compliance with mitigation requirements.

As indicated, there are project activities and subsequent (non-discretionary) approvals after a project's discretionary actions have been approved that are the appropriate time for implementation of mitigation measures (such as during construction or as part of building plan review). Retaining technical experts for monitoring construction activities, protection of resources found during construction activities, ensuring design features are incorporated into building plans, etc., and demonstrating compliance with identified mitigation after project approval is not deferral as suggested by the comment. As required, the Project-specific mitigation monitoring and reporting program (MMRP) included in Section 4.0 of this document clearly identifies the action required for each mitigation measure, the responsible parties for implementing the mitigation measure and monitoring implementation, and when the mitigation measure should be implemented. The City of Moreno Valley is responsible for



ensuring compliance with the MMRP after project approval. The MMRP provides for monitoring, implementation, and enforcement of all mitigation measures.

- G-13 This comment discusses CEQA requirements regarding mitigation measures generally (including repetition of similar statements in Comment G-11) and asserts without specificity that the Draft EIR fails to consider and deploy all feasible mitigation measures. Per PRC Sections 21002 and 21002.1(b), CEQA does not require adoption of every imaginable feasible mitigation measure. CEQA's requirement applies only to feasible mitigation that will "substantially lessen" a project's significant effects. Further, the comment does not provide any suggestions for additional mitigation. Notwithstanding, as identified in Section 3.0, Draft EIR Clarifications and Revisions, additional mitigation to further reduce the Project's operational air quality and GHG emission impacts have been identified.
- G-14 This comment discusses mitigation measures and project design features generally and incorrectly indicates without specificity that the Draft EIR improperly mischaracterizes mitigation measures as "project design features." The Project does not identify any Project Design Features (or PDFs) as mitigation measures, and the commenter has not provided any specific example of where this has occurred in the Draft EIR. No revisions to the Draft EIR analysis are required.
- G-15 This comment incorrectly indicates that the Project improperly relies on model or optional rules that are not legally enforceable or binding rather than mandatory mitigation measures. The only example referenced in the comment is mitigation measure MM 4.8-1 in Draft EIR Section 4.8, Greenhouse Gas Emissions. MM 4.8-1 is presented below and the text referred to in the comment is presented as bold-faced text for emphasis. Contrary to the commenter's assertion that this mitigation measure is voluntary, this mandatory mitigation measure, which is included in the Project's MMRP (refer to Section 4.0 of this document) is requiring implementation of these measures, which would otherwise be voluntary. The MMRP provides for monitoring, implementation, and enforcement of all mitigation measures.

MM 4.8-1 The project applicant shall design and build future non-residential development to meet/include the following:

- The project will utilize on-site renewable energy sources such as solar, to reduce electrical demand as per Division A5.211, Renewable Energy, of Appendix A5, **Nonresidential Voluntary Measures**, of the 2022 California Green Building Standards Code.
- The project will incorporate measures to reduce the overall use of potable water within the building by 12% as per Division A5.3, Water Efficiency and Conservation, as outlined under Section A5.303.2.3.1 of Appendix A5, **Nonresidential Voluntary Measures**, of the 2022 California Green Building Standards Code.

Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation



measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements.

- G-16 This comment includes speculative remarks regarding the Project construction schedule and potential air quality impacts that could result should Project construction timing and sequencing differ from the construction schedule presented in the Draft EIR. This comment also suggests that a time and duration-specific Project construction schedule should be mandated.

To the contrary, as explained in the Draft EIR, Section 3.0, Project Description, the proposed TCMV Specific Plan is designed to provide flexibility for development within the Specific Plan area. The proposed Specific Plan provides the regulatory framework to implement the proposed Project, recognizing that the market demand for the exact type and amount of uses may change. Further, as discussed in the Draft EIR, development pursuant to the proposed TCMV Specific Plan would occur in phases based on market demands. A reasonable potential buildout development scenario and the estimated construction schedule are set forth in the Draft EIR for purposes of analysis. Analysis of air quality impacts presented at Draft EIR Section 4.3, Air Quality, and Draft EIR Appendix B, Air Quality Impact Analysis (AQIA), including impacts based on the assumed Project construction schedule, are based on the best available information and reflect the Project and Project context described in the Draft EIR Section 3.0, Project Description. All AQIA modeling, including impact modeling predicated on the assumed Project construction schedule, has been prepared by accredited professionals in conformance with adopted CalEEMod and SCAQMD protocols and best practices. The City considers the AQIA included in Draft EIR Appendix B, including all air emissions modeling related to Project construction scheduling and construction sequencing, to accurately and adequately reflect potential Project construction-source air quality impacts.

As noted above, the comment is speculative. The commenter offers no evidentiary support indicating that alteration of the Project construction schedule and Project construction sequencing assumed in the Draft EIR and AQIA would somehow result in potentially significant impacts, or in any impacts not already considered and addressed in the Draft EIR and AQIA.

Additionally, variables (notably weather and economic factors) beyond the control of the City and Project Applicant can substantially affect construction activities and their scheduling. The City on this basis considers imposition of a time and duration-specific Project construction schedule to be infeasible.

Finally, with regard to the commenter's concern about delay, the estimated construction schedule represents a conservative analysis scenario should construction occur any time after the respective dates assumed in the analysis since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent. No revisions to the Draft EIR analysis are required.

- G-17 This comment generally discusses CEQA requirements for the cumulative impact analysis, identifies various court cases addressing this issue, and states generally, without specificity,



that the Draft EIR fails to adequately evaluate the Projects cumulative impacts. However, no comment was made regarding a specific cumulative impact analysis (i.e., for which topical issue) and no specific cumulative projects that should be considered in the analysis were identified (including completed past projects). Therefore, a specific response to these comments cannot be provided. A detailed description of the cumulative analysis approach used in the Draft EIR is provided in Section 4.0.2, Scope of Cumulative Effects Analysis. As explained in the Draft EIR, CEQA Guidelines Section 15130(b)(1) of the CEQA Guidelines states that the information utilized in an analysis of cumulative impacts should come from one of two sources, either:

- A. A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, **or**
- B. A summary of projections contained in an adopted local, regional, or Statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

There is no requirement to consider all cumulative projects within a certain distance of a Project, as asserted by the commenter. Cumulative impacts are addressed for each topic analyzed in Section 4.1 through Section 4.19 of the Draft EIR. The analysis employs both methods of analysis prescribed by the CEQA Guidelines. Contrary to the commenter's assertion that the Draft EIR does not analyze related cumulative projects, where appropriate to the analysis in question, cumulative impacts are assessed with reference to a list of cumulative projects. For example, the cumulative impacts analysis provided in Section 4.1, Aesthetics; Section 4.11, Land Use and Planning; and Section 4.13, Noise, specifically address the potential for cumulative impacts resulting from the Project in conjunction with adjacent and nearby cumulative projects. A comprehensive cumulative project list was compiled based on information provided by the City of Moreno Valley Planning and Engineering Departments. Draft EIR Figure 4.0-1, Cumulative Projects Location Map, illustrates the location of identified cumulative development with respect to the Project site. A summary of cumulative development projects and their proposed land uses are provided in Draft EIR Table 4.0-1, List of Cumulative Projects. With respect to completed past projects, these projects are considered in the Draft EIR as part of the existing/baseline condition, as appropriate. No revisions to the Draft EIR analysis are required.

- G-18 This comment discusses general plans generally and states that the Project is inconsistent and in conflict with land use plans for the Project site, including the General Plan and Housing Element. The comment asserts that Draft EIR fails to support its consistency finding with substantial evidence as required and further asserts that the Project cannot rely upon approval of its requested changes to conclude that the Project is consistent with the General and Specific Plans. The City has broad discretion in determining a project's consistency with its own General Plan, and the courts have repeatedly acknowledged that the body which adopted general plan policies has unique competence to interpret those policies when applying them. *Naraghi Lakes Neighborhood Preservation Ass'n v City of Modesto* (2016) 1 Cal.App.5th 9, 21; *Sequoiah Hills Homeowners Ass'n v City of Oakland* (1993) 23 Cal.App.4th 704, 719. The Draft EIR includes detailed discussions throughout the document about the City's existing 2006 General Plan, the 2040 General Plan that was previously adopted by the City but set aside



in response to a court decision, and the City's current project to adopt a new General Plan (refer to the discussion provided in Draft EIR Section 3.1, Project Background). As described in Draft EIR Section 3.4.1, General Plan Amendment, the Project does require an amendment to the General Plan due to the current "Public Facilities" land use designation under the 2006 General Plan. However, contrary to the commenter's assertion, the approval of a General Plan is not the basis for analysis or for the conclusion that the Project would not conflict with the General Plan. As identified in Draft EIR Section 4.11, Land Use and Planning, under the analysis of Threshold "b," the State's general rule for a General Plan consistency determination is that "an action, program, or project is consistent with the General Plan if, considering all its aspects, it will further the objectives and policies of the General Plan and not obstruct their attainment." Therefore, a detailed General Plan policy consistency analysis is provided for both the 2006 General Plan, and the City's previous 2040 General Plan (refer to Draft EIR Table 4.11-1 and Table 4.11-2, respectively), which the City is considering readopting. Additionally, similar General Plan policy consistency analysis is provided in Draft EIR Section 4.1, Aesthetics, and Section 4.16, Transportation, as there are thresholds of significance for these topics related to consistency with General Plan policies related to scenic quality and circulation, respectively. As presented in the detailed consistency analysis, the Project would not conflict with any applicable General Plan policies identified in the 2006 General Plan or previous 2040 General Plan for the respective General Plan elements; therefore, the Project was determined to be consistent with these General Plans.

- G-19 The comment discusses CEQA requirements relative to regulatory compliance and references a number of related court cases, repeating prior general comments. The commenter fails to explain that compliance with relevant regulatory standards can provide a basis for determining that the Project will not have a significant environmental impact. *Tracy First v. City of Tracy* (2009) 177 Cal.App.4th 912; *Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, 906 ("a condition requiring compliance with regulations is a common and reasonable mitigation measure and may be proper where it is reasonable to expect compliance.") This comment states generally, without specificity, that the Draft EIR improperly relies on future compliance with regulatory standards to support its findings regarding lack of significant impacts; however, the comment does not provide any specific identification of where this occurs in the Draft EIR. The Draft EIR appropriately analyzes the Project and its potential impacts and considers regulatory compliance where it is proper and reasonable to do so in compliance with CEQA.
- G-20 The comment is conclusory in nature and reflects the commenter's opinion that recirculation of the Draft EIR is required. As presented in the responses to comments in this document, the Draft EIR adequately analyzed the proposed Project and evaluated and disclosed the potential environmental impacts of the Project, consistent with the requirements of CEQA. The findings and conclusions of the Draft EIR are not affected by any of the comments contained herein, or the revisions to the Draft EIR identified in Section 3.0, Draft EIR Clarifications and Revisions. None of the circumstances set forth in CEQA Guidelines Section 15088.5 have been met. Specifically, based on the comments and responses within the Final EIR, no new significant impacts or substantial increases in already identified significant impacts have been identified. Therefore, recirculation of the Draft EIR is not required.



- G-21 The comment consists of three attachments to the comment letter. The first attachment (Exhibit A to the comment letter) is the March 8, 2021, SWAPE letter to Mitchell Tsai regarding local hire requirements and considerations for GHG modeling. The SWAPE letter is more than four years old, and it does not reference this particular Project, its impacts, or mitigation. The City and its consultants have thoroughly reviewed the SWAPE letter. It explains how the California Emissions Estimator Model (CalEEMod) calculates emissions from construction-related vehicle trips and discusses the relationship between trip length and GHG emissions. It is a generalized discussion, not made applicable to this Project. The SWAPE letter also provides an example of a local hire requirement for an example project. However, the example is not applicable to this Project in the City of Moreno Valley; therefore, while considered, it is inapplicable and does not raise any specific environmental issue related to the adequacy of the Draft EIR. The SWAPE letter also conducts an exercise using its sample project and the potential impacts of local hire requirements on estimated sample project-level GHG emissions, though it does not state that local hire requirements would result in reduced construction-related GHG emissions for all projects in all geographic areas. In short, the SWAPE letter is general and not applicable to the Project. Finally, the comment includes a disclaimer by SWAPE—the technical preparer. The disclaimer provides that as additional information is made available, SWAPE may amend its technical report.

The other two attachments (Exhibits B and C to the comment letter) are the resumes of Paul Rosenfeld and Matt Hagemann, respectively.

The comment does not raise any specific issues or questions on the environmental analysis provided in the Draft EIR.



3.0 DRAFT EIR CLARIFICATIONS AND REVISIONS

Changes made to the text, tables, and/or exhibits of the Draft EIR in response to public comments on the Draft EIR are itemized in Table 3-1, Errata Table of Clarifications and Revisions to the Draft EIR, and are hereby incorporated into the Draft EIR. Additions are shown in Table 3-1 as **bold and underlined** text and deletions shown as ~~stricken~~ text. Minor changes to the Draft EIR (e.g., corrections of non-substantive typographical errors) are not listed in Table 3-1. No corrections or additions made to the Draft EIR are considered substantial new information requiring recirculation or additional environmental review under CEQA Guidelines Section 15088.5.

Table 3-1 Errata Table of Clarifications and Revisions to the Draft EIR

Section(s)	Page(s)	Additions, Corrections, and/or Revisions Incorporated into the Draft EIR
S.0, Executive Summary	S-8	Future development implementing the proposed TCMV Specific Plan would adhere to the established Development Standards and Design Guidelines included in the TCMV Specific Plan and would not conflict with goals or policies outlined in the <u>2006 and 2040</u> General Plans or MVMC requirements that regulate scenic quality.
S.0, Executive Summary	S-26 S-27	MM 4.8-1 The project applicant shall design and build future non-residential development to meet/include the following: • The project will utilize on-site renewable energy sources such as solar, to reduce electrical demand as per Division A5.211, Renewable Energy, of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code. • The project will incorporate measures to reduce the overall use of potable water within the building by 12% as per Division A5.3, Water Efficiency and Conservation, as outlined under Section A5.303.2.3.1 of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code. • <u>The project will incorporate facilities to allow charging of electric bikes and scooters in appropriate locations within the Project site. A minimum of two charging spaces will be provided on-site.</u> • <u>Either 25% of the parking stalls in the Commercial/Civic Area will be made-ready for EV charging, or 20% of the 25% make-ready stalls will be installed as a level 3 charger. All EV chargers installed will be appropriately maintained for use.</u> • <u>Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable.</u>



Section(s)	Page(s)	Additions, Corrections, and/or Revisions Incorporated into the Draft EIR
		• <u>Electric HVAC units with electric heat pumps will be installed.</u> Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements. MM 4.8-2 The project applicant shall design and build future residential development to meet/include the following: • No wood-burning fireplaces shall be installed in any of the dwelling units. • <u>No natural gas or propane will be installed in the residential units.</u> All buildings shall be electric, ~~to the extent feasible,~~ meaning that electricity is the primary source of energy for water heating; heating, ventilation, and air conditioning (HVAC) within the building, excluding pool heating. • All major appliances provided/installed shall be EnergyStar-certified or of equivalent energy efficiency, where applicable. • <u>Level 2 electric vehicle supply equipment (EVSE) with National Electrical Manufacturers Association (NEMA) 14-50 outlets for each residential unit.</u> • <u>Solar installations on residential buildings to the extent practicable, considering necessary roof penetrations, design constraints, and solar/utility provider guidelines and restrictions.</u> • <u>Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable.</u> • <u>Residential buildings will be designed to accommodate ceiling fans.</u> Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements.



Section(s)	Page(s)	Additions, Corrections, and/or Revisions Incorporated into the Draft EIR
S.0, Executive Summary	S-37	The Project, which includes roadway improvements, and features to encourage non-vehicular travel and use of transit, would not conflict with a program, plan, ordinance, and/or policy addressing the circulation system, including SCAG's Connect SoCal, the 2006 or 2040 General Plans, and the MVMC resulting in a less than significant impact.
2.0, Environmental Setting	2-1	The area immediately north of the Project site has an "R5 Residential" land use designation in the <u>existing</u> City of Moreno Valley General Plan (<u>2006</u> General Plan) and is zoned "Residential 5 (R5) District."
3.0, Project Description	3-11	Linear Park +/- ~~4.3~~ 1.4 AC.
4.1, Aesthetics	4.1-24	Future development implementing the proposed TCMV Specific Plan would adhere to the established Development Standards and Design Guidelines included in the TCMV Specific Plan and would not conflict with goals or policies outlined in the 2006 and 2040 General Plans or MVMC requirements that regulate scenic quality.
4.2, Agriculture and Forestry Resources	4.2-7	This cumulative impact analysis for agricultural and forest land resources considers development of the Project site in conjunction with other development projects and planned development pursuant to the City's <u>2006 or 2040</u> General Plans.
4.2, Agriculture and Forestry Resources	4.2-7	The City does not contain any areas with 2006 or 2040 General Plan land use or zoning designations for agricultural uses.
4.4, Biological Resources	4.4-18	This cumulative impact analysis for biological resources considers development of the Project area in conjunction with other development projects in the vicinity of the Project area as well as full <u>2006 and 2040</u> General Plan buildout in the City of Moreno Valley and other jurisdictions in the region within the boundaries of the Western Riverside County MSHCP.
4.8, Greenhouse Gas Emissions	4.8-18	As identified, the Project would not conflict with the <u>2006 or 2040</u> General Plan goals and policies, or the Connect SoCal goals and growth projections.
4.8, Greenhouse Gas Emissions	4.8-20 4.8-21	MM 4.8-1 The project applicant shall design and build future non-residential development to meet/include the following: • The project will utilize on-site renewable energy sources such as solar, to reduce electrical demand as per Division A5.211, Renewable Energy, of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code. • The project will incorporate measures to reduce the overall use of potable water within the building by 12% as per Division A5.3, Water Efficiency and Conservation, as outlined under Section A5.303.2.3.1 of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code. • <u>The project will incorporate facilities to allow charging of electric bikes and scooters in appropriate locations within the Project site. A</u>



Section(s)	Page(s)	Additions, Corrections, and/or Revisions Incorporated into the Draft EIR
		<u>minimum of two charging spaces will be provided on-site.</u> • <u>Either 25% of the parking stalls in the Commercial/Civic Area will be made-ready for EV charging, or 20% of the 25% make-ready stalls will be installed as a level 3 charger. All EV chargers installed will be appropriately maintained for use.</u> • <u>Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable.</u> • <u>Electric HVAC units with electric heat pumps will be installed.</u> Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements. MM 4.8-2 The project applicant shall design and build future residential development to meet/include the following: • No wood-burning fireplaces shall be installed in any of the dwelling units. • <u>No natural gas or propane will be installed in the residential units.</u> All buildings shall be electric, ~~to the extent feasible,~~ meaning that electricity is the primary source of energy for water heating; heating, ventilation, and air conditioning (HVAC) within the building, excluding pool heating. • All major appliances provided/installed shall be EnergyStar-certified or of equivalent energy efficiency, where applicable. • <u>Level 2 electric vehicle supply equipment (EVSE) with National Electrical Manufacturers Association (NEMA) 14-50 outlets for each residential unit.</u> • <u>Solar installations on residential buildings to the extent practicable, considering necessary roof penetrations, design constraints, and solar/utility provider guidelines and restrictions.</u> • <u>Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a</u>



Section(s)	Page(s)	Additions, Corrections, and/or Revisions Incorporated into the Draft EIR
		<u>reflectance level to minimize heat absorption as practicable.</u> • <u>Residential buildings will be designed to accommodate ceiling fans.</u> Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements.
Section 4.15, Public Services and Recreation	4.15-12	The proposed TCMV Specific Plan includes approximately 4.9 acres of designated park area, including an approximately 3.5-acre area to be centrally located and open to the public, and an approximately ~~4.3~~ <u>1.4</u> -acre linear park.
4.16, Transportation	4.16-36	The Project, which includes roadway improvements, and features to encourage non-vehicular travel and use of transit, would not conflict with a program, plan, ordinance, and/or policy addressing the circulation system, including SCAG's Connect SoCal, the <u>2006 or 2040</u> General Plans, and the MVMC resulting in a less than significant impact.
5.0, Other CEQA Considerations	5-3	The <u>2006 and 2040</u> General Plans and Moreno Valley zoning ordinance anticipate development of the Project site. Implementation of the Project would commit the Project site to a mixed-use development consisting of residential, commercial/civic, and park uses.
5.0, Other CEQA Considerations	5-5	With respect to parks, the proposed TCMV Specific Plan includes approximately ~~4.8~~ <u>4.9</u> acres of public open space area, including an approximately 3.5-acre area to be centrally located within the Project site and an approximately ~~4.3~~ <u>1.4</u> -acre linear park.
5.0, Other CEQA Considerations	5-6	However, this type of growth is already anticipated in the City's <u>2006 and 2040</u> General Plans, and as identified on Figure 4.0-1, <i>Cumulative Projects Location Map</i> , is already being proposed. Therefore, implementation of residential and non-residential uses allowed by the proposed TCMV Specific Plan would support existing uses in the area, and could encourage or facilitate the growth envisioned in the <u>2006 and 2040</u> General Plans.
6.0, Alternatives	6-19	As with the Project, the Reduced Development – Less Residential Alternative would comply with City requirements and would not conflict with <u>2006 or 2040</u> General Plan policies related to transportation and circulation, including the construction of adjacent roadways and access improvements necessary to serve the Project, and the construction of improvements to encourage pedestrian and bicycle travel, and transit use.
6.0, Alternatives	6-28	As with the Project, the Reduced Development – Less Commercial Alternative would comply with City requirements and would not conflict with <u>2006 or 2040</u> General Plan policies related to transportation and circulation, including construction of adjacent roadways and access improvements necessary to serve the Project,

Section(s)	Page(s)	Additions, Corrections, and/or Revisions Incorporated into the Draft EIR
		and construction of improvements to encourage pedestrian and bicycle travel, and transit use.
6.0, Alternatives	6-31	As with the Project, this Alternative would have less than significant impacts related to impacts on a scenic vista, and conflict with goals or policies outlined in the <u>2006 and 2040</u> General Plans or MVMC requirements that regulate scenic quality, and no impact related to degrading scenic resources within a State Scenic Highway.
6.0, Alternatives	6-36	As with the Project, the Reduced Development – Less Residential and Less Commercial Alternative would comply with City requirements and would not conflict with <u>2006 or 2040</u> General Plan policies related to transportation and circulation, including construction of adjacent roadways and access improvements necessary to serve the Project, and construction of improvements to encourage pedestrian and bicycle travel, and transit use.

3.1 NO RECIRCULATION OF DRAFT EIR REQUIRED

CEQA Guidelines Section 15088.5 describes the conditions under which a draft EIR that was circulated for public review is required to be re-circulated for additional public review and comment. CEQA Guidelines Section 15088.5(a) states that “[n]ew 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. ‘Significant new information’ requiring recirculation include[s], for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”

Based on the comment letters received by the City of Moreno Valley and the responses thereto (presented in Section 2.0, above) and the minor revisions made to the Draft EIR (presented in Table 3-1 above), there were no public comments or changes to the text or analysis presented in the Draft EIR that resulted in the identification of any new significant environmental effect or a substantial increase in the severity of an environmental effect that were disclosed in the Draft EIR. In response to comments received on the Draft EIR, two of the Project’s mitigation measures were altered (MM 4.8-1 and 4.8-



2, as described in Table 3-1); however, the changes to the mitigation measures did not substantially alter the mitigation actions required of the Project Applicant or create new impacts. Additionally, the Draft EIR was fundamentally and basically adequate, and all conclusions within the Draft EIR were supported by evidence provided within the Draft EIR or the administrative record for the Project. Furthermore, public comment letters on the Draft EIR did not identify any alternatives to the proposed Project which were considerably different from those analyzed in the Draft EIR that would substantially lessen the significant environmental impacts of the proposed Project while still attaining the Project's basic objectives. Based on the foregoing, recirculation of the Draft EIR is not warranted according to the guidance set forth in Section 15088.5 of the CEQA Guidelines.



4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for use in ensuring the implementation of the required mitigation for the Town Center at Moreno Valley (TCMV) Specific Plan Project (Project). The MMRP has been prepared in compliance with State law and the Town Center at Moreno Valley Specific Final Environmental Impact Report (EIR) (State Clearinghouse No. 2022040417).

CEQA requires adoption of a reporting or monitoring program for the changes made to the Project or conditions of Project approval, adopted in order to mitigate or avoid adverse effects on the environment (PRC Section 21081.6). The law states that the reporting or monitoring program shall be designed to ensure compliance during Project implementation.

This MMRP includes mitigation measures (MMs) from the TCMV Specific Plan Final EIR.

4.2 MITIGATION MONITORING AND RESPONSIBILITIES

As the Lead Agency, the City of Moreno Valley (City) is responsible for ensuring full compliance with the mitigation measures adopted for the Project. The City will monitor and report on all mitigation activities. Mitigation measures will be implemented at different stages of development throughout the Project site. In this regard, the responsibilities for implementation have been assigned to the Property Owner/Developer, Contractor, or a combination thereof.



Table 4-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 AESTHETICS					
<u>Threshold a: Less than Significant Impact.</u> The Project site is not within a City-designated view corridor, and the Project does not involve any development within or adjacent to any scenic resources that define a scenic vista. The public views available from Nason Street, Alessandro Boulevard, and Cottonwood Avenue adjacent to the Project site would largely be retained, and the Project's potential impacts to scenic views of distant mountains and Moreno Peak would be less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold b: No Impact.</u> The Project site is not within the viewshed of a State scenic highway; therefore, the Project would not degrade scenic resources within a State scenic highway. No impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold c: Less than Significant Impact.</u> Future development implementing the proposed TCMV Specific Plan would adhere to the established Development Standards and Design Guidelines included in the TCMV Specific Plan and would not conflict with goals or policies outlined in the General Plan or MVMC requirements that regulate scenic quality. This impact would be less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold d: Potentially Significant Impact (Construction)/Less than Significant Impact (Operation).</u> Construction-related lighting has the potential to create substantial light, which could adversely affect adjacent residential uses, resulting in a potentially significant temporary impact. Future development implementing the proposed TCMV Specific Plan would adhere to established Development Standards and Design Guidelines and MVMC requirements related to lighting and non-reflective building materials and would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant.	MM 4.1-1 Prior to the issuance of grading permits, the Property Owner/Developer shall provide evidence to the City that the contractor specifications require that the construction staging area be located as far as possible from the existing residential development surrounding the Project site to minimize light intrusion. Temporary nighttime lighting installed during construction for security or any other purpose shall be downward-facing and hooded or shielded to prevent light from spilling outside the staging area and from directly broadcasting security light into the sky or onto adjacent residential properties. Compliance with this	Property Owner/Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of grading permits.	Less than Significant Impact with Mitigation.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	measure shall be verified by the City during inspections of the construction site.				
4.2 AGRICULTURE AND FORESTRY					
<u>Threshold a: No Impact.</u> The Project site does not contain Farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) and there are no agricultural activities onsite. The Project would not convert Farmland to non-agricultural uses and no impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold b: No Impact.</u> The City does not contain areas zoned for agricultural uses and the Project site does not contain land under a Williamson Act Contract. The Project would not conflict with a Williamson Act Contract or agricultural zoning and no impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold c: No Impact.</u> The City does not have a forest land zone; therefore, the Project would not conflict with any forest land zoning and no impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold d: No Impact.</u> There is no forest land within the City; therefore, the Project would not result in the loss of forest land or conversion of forest land to non-forest uses and no impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold e: No Impact.</u> The Project would not result in any other changes that would result in the conversion of farmland to non-agricultural uses or the conversion of forest land to non-forest use and no impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.



THRESHOLD	MITIGATION MEASURES (MM)		RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.3 AIR QUALITY						
<u>Threshold a:</u> Significant Project and Cumulative Impact. The Project could result in or cause NAAQS or CAAQS violations because operational-source emissions would exceed the applicable SCAQMD regional thresholds for VOC, NO _x , and CO. As such, the Project is conservatively considered to have the potential to conflict with the AQMP and a significant impact would occur with respect to this threshold.	MM 4.3-2	Legible, durable, weather-proof signs shall be placed at commercial loading docks and truck parking areas that identify applicable CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations. Prior to the issuance of an occupancy permit, the City shall conduct a site inspection to ensure that the signs are in place.	Property Owner/ Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of an occupancy permit.	Significant and Unavoidable Impact.
	MM 4.3-3	Prior to the issuing of each building permit, the Project proponent and its contractors shall provide plans and specifications to the City that demonstrate that electrical service is provided to each of the areas in the vicinity of the buildings that are to be landscaped in order that electrical equipment may be used for landscape maintenance.	Property Owner/Developer and Project Contractor	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of each building permit.	
	MM 4.3-4	Once constructed, the Project proponent shall ensure that all commercial tenants shall utilize only electric or natural gas pallet jacks and forklifts in the loading areas.	Property Owner/Developer and Commercial tenants	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to tenant occupancy.	
	MM 4.3-5	Upon occupancy and annually thereafter, the operators of the commercial space shall provide information to all delivery truck drivers, regarding:	Property Owner/Developer and Commercial tenants	City of Moreno Valley Building and Safety Division and Land Development Division	Upon occupancy and thereafter.	



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THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	• Building energy efficiency, solid waste reduction, recycling, and water conservation. • Vehicle GHG emissions, electric vehicle charging availability, and alternate transportation opportunities for commuting. • Participation in the Voluntary Interindustry Commerce Solutions (VICS) “Empty Miles” program to improve goods trucking efficiencies. • Health effects of diesel particulates, State regulations limiting truck idling time, and the benefits of minimized idling. • The importance of minimizing traffic, noise, and air pollutant impacts to any residences in the Project vicinity. MM 4.3-6 Prior to issuance of a building permit, the Project proponent shall provide the City with an on-site signage program that clearly identifies the required on-site circulation system. This shall be accomplished through posted signs and painting on driveways and internal roadways.	Property Owner/ Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of each building permit.	
Threshold b: Significant Project and Cumulative Impact. Prior to mitigation, the Project would exceed the applicable SCAQMD regional thresholds for VOC during construction, and VOC, NO _x , and CO during operation. Therefore, construction and operation of the Project would contribute to existing violations of the O ₃ standard (VOC and NO _x are O ₃ precursors) and would result in a significant cumulatively considerable net increase of a criteria pollutant for which the Project region is nonattainment under an applicable federal or State ambient air quality standard.	MM 4.3-1 The Project shall incorporate the following mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City. • Require fugitive-dust control measures that exceed SCAQMD’s Rule 403 requirements, such as: - o Use of nontoxic soil stabilizers to reduce wind erosion.	Property Owner/Developer and Project Contractor	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of a grading permit.	Construction: Less than Significant Impact with Mitigation Incorporated. Operations: Significant and Unavoidable Impact.



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	- o Apply water every four hours to active soil-disturbing activities. - o Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials. • Encourage the use of construction equipment equal to or greater than 50 horsepower be electrically powered or alternatively fueled. At a minimum, use construction equipment rated by the United States Environmental Protection Agency as having Tier 4 Final (model year 2008 or newer) emission limits. Include this requirement in applicable bid documents, purchase orders, and contracts. • Ensure that construction equipment is properly serviced and maintained to the manufacturer's standards. • Limit nonessential idling of construction equipment to no more than five consecutive minutes. • Limit on-site vehicle travel speeds on unpaved roads to 15 miles per hour. • Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area. • Use Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufacturers can be found on SCAQMD's website.				
	See MM 4.3-2 through MM 4.3-6 above for operations.	Refer to Air Quality Threshold "a"	Refer to Air Quality Threshold "a"	Refer to Air Quality Threshold "a"	
<u>Threshold c: Less than Significant Impact.</u> During construction, the Project would not expose nearby sensitive receptors to substantial pollutant concentrations because the Project's localized emissions would not exceed SCAQMD LSTs and impacts would be less than significant. Additionally,	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
the Project does not propose uses that include stationary sources or attract mobile sources that may spend long periods of time queuing and idling at the site; thus, no long-term localized significance threshold analysis is needed. Impacts would be less than significant. Under long-term operating conditions, the Project's contributions to CO "Hot Spots" would also be less than significant.					
Threshold d: Less than Significant Impact. The Project would not produce air emissions that would lead to unusual or substantial construction-related or operational odors. The Project is required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.4 BIOLOGICAL RESOURCES					
Threshold a: Potentially Significant Impact. No sensitive plant species were detected within the Project area and potential impacts to the San Diego tarplant, a CRPR 4.2 species, would be less than significant. One special-status species (Cooper's hawk) was observed within the Project area during the biological survey and has a low potential to nest in the trees within the Project area. The Project area has suitable foraging and nesting habitat for BUOW and roosting habitat for the western mastiff bat. Construction activities also have the potential to result in indirect noise impacts to roosting western mastiff bats in trees near the Project area. If any of these species, active nests, or roosts are present within the Project area during construction, impacts to the biological resources would be potentially significant.	MM 4.4-1 Prior to the issuance of grading permits, the Property Owner/Developer shall provide the City with proof of retention of a qualified biologist to implement this mitigation measure. If the removal of any trees, shrubs, or any other potential nesting and foraging habitat for avian species, including sensitive species and raptor nests, is to be conducted within the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors), a nesting bird survey shall be required within three days prior to start of work. If active nests are identified, the biologist will establish appropriate buffers around the area (typically 500 feet for raptors and sensitive species, and 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The on-site biologist will review and verify compliance with	Property Owner/Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of grading permits.	Less than Significant Impact with Mitigation.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	these nesting boundaries and verify the nesting effort has finished. Work can resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that certain work can be permitted within the buffer areas and develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). If vegetation clearing is not initiated within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds. If vegetation removal occurs outside of nesting season or if no nesting birds are found, no further action will be required. MM 4.4-2 Prior to the issuance of grading permits, the Property Owner/Developer shall provide the City with proof of retention of a qualified biologist to implement this mitigation measure. A pre-construction presence/absence survey for BUOW within the Project area where suitable habitat is present shall be conducted by a qualified biologist within 30 days prior to the commencement of ground-disturbing activities. If active BUOW burrows are detected during the breeding season, all work within an appropriate buffer (typically a minimum of 300 feet) of any active burrow will be halted. If there is an active nest at the burrow, work will not proceed within the buffer until that nesting effort is finished. The on-site biologist will review and verify compliance with these boundaries and will verify the nesting effort has finished. Work can resume in the buffer when there are no occupied/active	Property Owner/Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of grading permit.	



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	BUOW burrows found within the buffer area. If there are occupied burrows within the buffer area and avoidance of burrowing owls is not possible, no work shall occur within the buffer area until the appropriate course of action is determined and implemented in accordance with applicable regulations related to burrowing owl at the time of project construction. CDFW may require an Incidental Take Permit (ITP) or a Burrowing Owl Relocation and Mitigation Plan, in accordance with applicable regulations at the time of project construction. If burrowing owl is no longer a candidate or listed species under CESA at the time of project construction, permits shall not be required. MM 4.4-3 Prior to the issuance of grading permits, the Property Owner/Developer shall provide the City with proof of retention of a qualified biologist to implement this mitigation measure. Pre-construction surveys shall be conducted by a qualified bat biologist no more than 30 days prior to the initiation of vegetation removal and ground-disturbing activities if within the maternity season (March 1 to August 31). If no active roosts are present, then trees shall be removed within two weeks following the survey. If active bat roosts are found, then then the following shall be implemented, as appropriate: a. If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e.,	Property Owner/Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to the issuance of grading permits.	



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special-status species and the roost is not being used as a maternity roost and direct removal of active roosts is required, then the bats may be evicted from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans. If special-status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts will occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost. b. If special-status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) will occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to				



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed. c. All potential roost trees shall be removed in a manner approved by a qualified bat biologist, which may include presence of a biological monitor. d. All construction activity in the vicinity of an active maternity roost shall be limited to daylight hours. e. Results of the survey shall be submitted to the City prior to removal of the trees. If additional measures are required under (a) through (d), the submittal to the City will include those additional measures.				
Threshold b: <u>No Impact</u> . The Project area does not contain any riparian habitat, critical habitat, or other sensitive natural communities. Therefore, the Project would have no impacts to these biological resources.	No mitigation is required.	NA	NA	NA	No Impact.
Threshold c: <u>No Impact</u> . The Project area does not contain State- or federally-protected wetlands; therefore, no impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
Threshold d: <u>Potentially Significant Impact</u> . The Project would not interfere with the movement of fish or impede the use of a native wildlife nursery site; however, construction activities could result in impacts to nesting avian species, which would be in	Mitigation measures MM 4.4-1 through MM 4.4-3 shall apply.	Refer to Biological Resources Threshold a	Refer to Biological Resources Threshold a	Refer to Biological Resources Threshold a	Less than Significant Impact with Mitigation.



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THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
violation of the MBTA and CFGC and/or would result in impacts to protected bat maternity roosts if construction activities are to take place during nesting or maternity roosting season.					
<u>Threshold e: Less than Significant Impact.</u> The Project would comply with MVMC Chapter 3.48 and Chapter 8.60, which require fee payments for the MSHCP and protection of the Stephens' Kangaroo Rat. In addition, the Project would comply with MVMC Section 9.17.030(g), as applicable, with regards to tree protection (compliance with this requirement is ensured with implementation of MM 4.4-4). The Project would not conflict with any local policies or ordinances protecting biological resources.	MM 4.4-4 Prior to any removal of trees potentially regulated by the City of Moreno Valley Municipal Code, a qualified arborist shall conduct a tree survey in the area of the Project site in which regulated trees are proposed to be removed. Data to be collected on appropriate data forms includes the exact location of the tree, species, diameter at breast height, and information on the general character and health of the tree. All regulated trees to be removed shall be flagged in the field and entered into a GIS database. This information shall be included in an arborist report to be submitted to the City. Pursuant to Section 9.17.03 of the City of Moreno Valley Municipal Code, the removal of existing trees with four-inch or greater trunk diameters at breast height (dbh) shall be replaced at a 3:1 ratio, with a minimum 24-inch box size tree of the same species or a minimum 36-inch box for a 1:1 replacement, in locations approved by the City.	Property Owner/Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to removal of regulated trees.	Less than Significant Impact.
<u>Threshold f: Potentially Significant Impact.</u> The Project area is subject to the Western Riverside County MSHCP and its survey requirements for the BUOW. Although the Project is compliant with all applicable MSHCP provisions, and given the BUOW was not observed during the biological survey or focused surveys, the Project area has suitable habitat for the species. If the species migrates within the Project area and is present at the time the grading permit is issued, impacts on BUOW would be potentially significant.	Mitigation measures MM 4.4-1 through MM 4.4-3 shall apply.	Refer to Biological Resources Threshold a	Refer to Biological Resources Threshold a	Refer to Biological Resources Threshold a	Less than Significant Impact with Mitigation.



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THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.5 CULTURAL RESOURCES					
<u>Threshold a: No Impact.</u> No historic resources as defined by CEQA Guidelines Section 15064.5 are present within the Project area; therefore, no historic resources would be altered or destroyed by construction or operation of the Project.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold b: Potentially Significant Direct and Cumulatively Considerable Impact.</u> No known archaeological resources are present on the Project site. Nonetheless, the potential exists for Project-related construction activities to result in a direct and cumulatively considerable impact to significant subsurface prehistoric archaeological resources should such resources to be discovered during Project-related construction activities.	MM 4.5-1 Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all mass grading and trenching activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB 52 to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the Project site. A Consulting Tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB 52 consultation process, and has completed AB 52 consultation with the City as provided for in <i>California Public Resources Code</i> Section 21080.3.2(b)(1) of AB 52. Details in the Plan shall include: a. Project grading and development scheduling; b. The Project Archeologist and the Consulting Tribes(s) as defined above shall attend the pre-grading meeting with the City, the construction manager, and any contractors, and will conduct a	Project Developer and Project Archaeologist	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a grading permit.	Less than Significant Impact with Mitigation



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	mandatory Cultural Resources Worker Sensitivity Training for those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project Archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as needed basis; c. The protocols and stipulations that the contractor, City, Consulting Tribe(s), and Project archaeologist shall follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. MM 4.5-2 Prior to the issuance of a grading permit, the Developer shall secure an agreement with the Pechanga Band of Luiseño Indians regarding monitoring during ground-disturbing activities. The Developer is also required to provide a minimum of 30 days' advance notice to	Project Developer	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a grading permit.	



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	the tribe of all mass grading and trenching activities. The Native American Tribal Representative shall have the authority to temporarily halt and redirect earth-moving activities in the affected area in the event that suspected archaeological resources are unearthed. If the Native American Tribal Representative suspects that an archaeological resource may have been unearthed, the Project Archaeologist or the Tribal Representative shall immediately redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the Native American Tribal Representative, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to <i>California Public Resources Code</i> Section 21083.2. MM 4.5-3 In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries: a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Moreno Valley Planning Department: i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development	Project Developer and Project Archaeologist	City of Moreno Valley Planning Division and Building and Safety Division	If Native American cultural resources are discovered during grading	



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	affecting the integrity of the resources. ii. On-site reburial of the discovered items as detailed in the treatment plan required pursuant to Mitigation Measure (MM) 4.5-1. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in MM 4.5-1. MM 4.5-4 The City shall verify that the following note is included on the Grading Plan: <i>If any suspected archaeological resources are discovered during ground-disturbing activities and the Project Archaeologist or Native American Tribal Representative are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and the Tribal Representative to the site to assess the significance of the find.</i> MM 4.5-5 If potential historic or cultural resources are uncovered during excavation or construction activities at the project site, work in the affected area must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to	Project Developer and Project Archaeologist Project Developer and Project Archaeologist	City of Moreno Valley Planning Division and Building and Safety Division City of Moreno Valley Planning Division and Building and Safety Division	Prior to issuance of grading permit and if any suspected archaeological resources are discovered during ground-disturbing activities If potential historic or cultural resources are uncovered during excavation or construction activities	



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	evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration and implemented as deemed appropriate by the Community Development Director and any and all Consulting Native American Tribes as defined in MM 4.5-1 before any further work commences in the affected area.				
Threshold c: <u>Less than Significant Impact</u> . In the unlikely event that human remains are discovered during Project grading or other ground-disturbing activities, the Project would be required to comply with the applicable provisions of <i>California Health and Safety Code</i> Section 7050.5 and PRC Section 5097 et seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.6 ENERGY					
Threshold a: <u>Less than Significant Impact</u> . The amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy facilities or energy delivery systems.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
Threshold b: <u>Less than Significant Impact</u> . The Project would not cause or result in the need for additional energy production or transmission facilities, the Project would not conflict with or obstruct the achievement of energy conservation goals identified in State and local plans for renewable energy and energy efficiency.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.7 GEOLOGY AND SOILS					
<u>Threshold a: Less than Significant Impact.</u> Implementation of the Project would not expose people or structures to substantial direct or indirect adverse effects related to fault rupture. The Project site is subject to seismic ground shaking associated with earthquakes and has a low to moderate susceptibility to liquefaction; however, mandatory compliance with local and State regulatory requirements and building codes, and adherence to recommendations from site-specific geotechnical report(s) (via conditions of approval), would ensure that the Project minimizes potential hazards related to seismic ground shaking and seismic-related ground failure, including liquefaction, to less than significant levels.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold b: Less than Significant Impact.</u> Implementation of the Project would not result in substantial soil erosion or loss of topsoil. Construction activities would be conducted in compliance with regulations addressing erosion during construction (e.g., NPDES permit and preparation of a SWPPP), and preparation of an erosion control plan is required to minimize water and wind erosion. Following completion of development, implementation of a WQMP during operation is required (via conditions of approval), which would preclude substantial long-term erosion impacts.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold c: Less than Significant Impact.</u> There is no potential for the Project's construction or operation to cause, or be impacted by, on- or off-site landslides. Potential hazards associated with unstable soils would be precluded through mandatory adherence (via conditions of approval) to the recommendations contained in the site-specific geotechnical report(s) during Project construction.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold d: No Impact.</u> The Project site does not contain expansive soils. As such, the Project is not located on a geologic unit with a high expansion potential.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold e: No Impact.</u> The Project does not propose the use of septic tanks or alternative wastewater disposal system.	No mitigation is required.	NA	NA	NA	No Impact.



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<u>Threshold f. Potentially Significant Impact.</u> The Project site contains sediment deposits with a sensitivity for paleontological resources. Accordingly, construction activities on the Project site have the potential to unearth and adversely impact paleontological resource that may be buried beneath the ground surface.	MM 4.7-1 Prior to the issuance of grading permits and/or action that would permit Project site disturbance, the Project Applicant shall provide written evidence to the City of Moreno Valley that the Project Applicant has retained a qualified Paleontologist to observe grading activities into the paleontologically sensitive fluvial fan deposits and to conduct salvage excavation of paleontological resources as necessary. Sediment samples should also be recovered to determine the small-fossil potential of the site. The Paleontologist shall be present at the pre-grading conference; shall establish procedures and a schedule for paleontological resources surveillance; and shall establish, in cooperation with the City, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the fossils as appropriate. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the City of Moreno Valley. The Project Paleontologist shall prepare a final paleontological resource monitoring and mitigation report of findings and significance, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). All recovered fossils will be offered for curation in perpetuity to the Western Science Center in Hemet, the principal fossils repository in Riverside County. A letter documenting receipt and acceptance of all fossil collections by the receiving institution must be included in the final report. The report, when submitted to	Property Owner/Developer and Project Paleontologist	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to the issuance of a grading permit and/or action that would permit site disturbance.	Less than Significant Impact with Mitigation.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	(and accepted by) the City of Moreno Valley, shall signify satisfactory completion of the project program to mitigate impacts to any nonrenewable paleontological resources.				
4.8 GREENHOUSE GAS EMISSIONS					
<u>Threshold a: Cumulatively Considerable Impact.</u> The Project would exceed the SCAQMD significance threshold of 3,000 MTCO ₂ e/yr. As such the Project would generate substantial, cumulatively-considerable GHG emissions that may have a significant impact on the environment.	MM 4.8-1 The project applicant shall design and build future non-residential development to meet/include the following: • The project will utilize on-site renewable energy sources such as solar, to reduce electrical demand as per Division A5.211, Renewable Energy, of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code. • The project will incorporate measures to reduce the overall use of potable water within the building by 12% as per Division A5.3, Water Efficiency and Conservation, as outlined under Section A5.303.2.3.1 of Appendix A5, Nonresidential Voluntary Measures, of the 2022 California Green Building Standards Code. • The project will incorporate facilities to allow charging of electric bikes and scooters in appropriate locations within the Project site. A minimum of two charging spaces will be provided on-site. • Either 25% of the parking stalls in the Commercial/Civic Area will be made-ready for EV charging, or 20% of the 25% make-ready stalls will be installed as a level 3 charger.	Property Owner/Developer	City of Moreno Valley Planning Division and Building and Safety Division	Prior to issuance of building permits.	Significant and Unavoidable Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	All EV chargers installed will be appropriately maintained for use. - Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable. - Electric HVAC units with electric heat pumps will be installed. Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements. MM 4.8-2 The project applicant shall design and build future residential development to meet/include the following: - No wood-burning fireplaces shall be installed in any of the dwelling units. - No natural gas or propane will be installed in the residential units. All buildings shall be electric, meaning that electricity is the primary source of energy for water heating; heating, ventilation, and air conditioning (HVAC) within the building, excluding pool heating. - All major appliances provided/installed shall be EnergyStar-certified or of	Property Owner/Developer	City of Moreno Valley Planning Division and Building and Safety Division	Prior to issuance of building permits.	



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	equivalent energy efficiency, where applicable. • Level 2 electric vehicle supply equipment (EVSE) with National Electrical Manufacturers Association (NEMA) 14-50 outlets for each residential unit. • Solar installations on residential buildings to the extent practicable, considering necessary roof penetrations, design constraints, and solar/utility provider guidelines and restrictions. • Concrete sidewalks will be installed to meet City requirements, provide safety, and allow a reflectance level to minimize heat absorption as practicable. • Residential buildings will be designed to accommodate ceiling fans. Prior to the issuance of building permits for new development projects within the project site, the project applicant shall provide documentation (e.g., building plans, site plans) to the City of Moreno Valley Planning Division to verify implementation of the applicable design requirements specified in this mitigation measure. Prior to the issuance of the certificate of occupancy, the City shall verify implementation of these design requirements.				
	MM 4.8-3 Exterior electric receptacles on non-residential buildings shall be provided for charging or powering electric landscaping equipment.	Property Owner/Developer	City of Moreno Valley Planning Division and Building and Safety Division	Prior to issuance of building permits.	



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	MM 4.8-4 The Project shall use light-color roofing and building materials to minimize the heat island effect and reduce lighting, heating, and cooling needs. Mitigation measures MM 4.3-2 through MM 4.3-6 shall also apply.	Property Owner/Developer Refer to Air Quality Threshold a	City of Moreno Valley Planning Division and Building and Safety Division Refer to Air Quality Threshold a	Prior to issuance of building permits. Refer to Air Quality Threshold a	
<u>Threshold b: Less than Significant Impact.</u> The Project would be consistent with or otherwise would not conflict with applicable regulations, policies, plans, and goals that would further reduce GHG emissions.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.9 HAZARDS AND HAZARDOUS MATERIALS					
<u>Thresholds a and b: Less than Significant Impact.</u> The Project site does not contain any RECs. During Project construction and operation, mandatory compliance with federal, State, and local regulations would ensure that the Project would not create a significant hazard to the environment due to routine transport, use, disposal, or upset of hazardous substances or materials. Additionally, due to the nature of the Project, routinely used hazardous materials would not be of the type or occur in sufficient quantities to pose a significant hazard to public health and safety or the environment.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold c: Less than Significant Impact.</u> The Project site is located within one-quarter mile of existing schools; however, there would be no hazardous emissions, and the handling of hazardous materials, substances, or waste would not involve the type or quantity that would pose a significant hazard to public health and safety or the environment. Additionally, the Project would be required to comply with federal, State, and local regulations to ensure that the Project would not create a significant hazard to the public or environment.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold d: No Impact.</u> The Project site is not identified on any list of hazardous materials sites complied pursuant to <i>Government Code</i> Section 65962.5.	No mitigation is required.	NA	NA	NA	No Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<u>Threshold e: Less than Significant Impact.</u> The Project site is located more than two miles northeast of MARB/IP Airport and is not within the AIA. Additionally, the Project does not involve any construction or operations that require FAA notification pursuant to FAR Part 77. As such, the Project would not result in an airport safety hazard for people residing or working in the Project area.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold f: No Impact.</u> The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During construction and long-term operation, adequate emergency vehicle access is required to be provided. The Project would involve the construction of new roadways, which would improve local access. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.	No mitigation is required	NA	NA	NA	No Impact.
<u>Threshold g: Less than Significant Impact.</u> The Project site does not contain wildlands and is not within a VHFHSZ; the nearest VHFHSZ is approximately 0.4-mile from the Project site. The Project would not expose people or structures to a significant wildfire risk.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.10 HYDROLOGY AND WATER QUALITY					
<u>Threshold a: Less than Significant Impact.</u> The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Adherence to a SWPPP and site-specific WQMPs is required as part of the Project's implementation to address construction- and operational-related water quality.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold b: Less than Significant Impact.</u> The Project would not physically impact any groundwater recharge facilities. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the Groundwater Basin.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<u>Threshold c: Less than Significant Impact.</u> The Project would increase stormwater runoff from the Project site, which would be discharged to the public storm drain system. The Project would not substantially alter the drainage pattern or site or area and would be required to comply with applicable water quality regulatory requirements to minimize erosion and siltation. Additionally, the Project would not result in flooding onsite or offsite or impede/redirect flood flows. Lastly, the Project would not create or contribute to increased flooding risks due to insufficient capacity of existing or planned stormwater drainage systems or and would not provide substantial additional sources of polluted runoff.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold d: No Impact.</u> The Project site would not be subject to inundation from tsunamis, seiches, or hazards.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold e: Less than Significant Impact.</u> The Project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.11 LAND USE PLANNING					
<u>Threshold a: No Impact.</u> The Project would involve development of the currently vacant Project site with residential, commercial/civic, and park uses, on a vacant site planned for development. The Project would not obstruct access to and from the existing neighborhoods, and would improve connectivity with implementation of proposed roadway improvements. The implementation of the Project would not physically divide an established community and no impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold b: Less than Significant Impact.</u> Implementation of the Project would not conflict with the City's existing 2006 General Plan or proposed 2040 General Plan, which the City is in the process of readopting; MVMC; or SCAG's <i>Connect SoCal 2024</i> , and specifically would not conflict with applicable environmental plans, policies, and regulations adopted for the purpose of avoiding or mitigating an	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
environmental effect. This impact would be less than significant.					
4.12 MINERAL RESOURCES					
<u>Threshold a: No Impact.</u> The Project site does not have any known mineral resources that would be of value to the region or residents of the State. Accordingly, with implementation of the Project, there would be no impact on known mineral resources.	No mitigation is required.	NA	NA	NA	No Impact.
<u>Threshold b: No Impact.</u> The Project site is not within a mineral resource recovery site. Therefore, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.
4.13 NOISE					
<u>Threshold a: Less than Significant Impact.</u> During construction and operation (onsite noise sources and off-site traffic noise) the Project would not generate 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. Therefore, this impact is less than significant. Conditions of Approval (COAs) are required to ensure that the City's noise standards for the proposed uses are met.	No mitigation is required; however, the following COAs would be implemented. COA 4.13-1 Six-foot-high noise barriers shall be constructed for the private yards of single-family residential land use and outdoor common areas for multi-family residential land use represented by the on-site receiver locations ON1, ON2, and ON7 on EIR Figure 4.13-5, <i>Onsite Receiver Locations and Recommended Noise Abatement Measures</i> . The noise control barriers shall be constructed so that the top of each wall extends to the recommended height above the pad elevation of the lot it is shielding. When the road is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the road. The barrier shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the	Property Owner/Developer	City of Moreno Valley Building and Safety Division and Land Development Division	During Construction	Less than Significant Impact



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	roadways, or a minimum transmission loss of 20 dBA. The barrier must present a solid face from top to bottom. Unnecessary openings or decorative cutouts shall not be made. All gaps (except for weep holes) should be filled with grout or caulking. COA 4.13-2 To satisfy the State of California's 45 dBA CNEL noise insulation standards, all residential land uses adjacent to Cottonwood Avenue, Nason Street, and Alessandro Boulevard shall require a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). Upgraded windows with minimum STC rating of 30 are required for the single-family residential land uses located west of Nason Street represented by the on-site receiver location ON2. With the following noise abatement measures, the on-site interior traffic noise levels would satisfy the 45 dBA CNEL interior noise requirements. <u>Windows/Sliding Glass Doors:</u> All residential units require windows and sliding glass doors that have well-fitted, well-weather-stripped assemblies, and the following sound transmission class (STC) ratings: 1. Single-family residential land uses located west of Nason Street represented by the on-site receiver location ON2 require upgraded windows and sliding glass doors with minimum STC ratings of 30 (all windows/glass doors, all floors); 2. All other residential lots require windows and sliding glass doors with minimum sound	Property Owner/Developer	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to issuance of building permits.	



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	transmission class (STC) ratings of 27. Exterior Doors (Non-Glass): All exterior doors shall be well weather-stripped and have well-sealed perimeter gaps around the doors to achieve the STC ratings recommended below: 1. Single-family residential land uses located west of Nason Street represented by the on-site receiver location ON2 require upgraded doors with minimum STC ratings of 30 (all floors); 2. All other residential lots require doors with minimum sound transmission class (STC) ratings of 27. Exterior Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal. Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space. Ventilation: Consistent with MVMC Section 9.03.040(F)(3), in all residential districts, air conditioners, heating, cooling and ventilating equipment and all other mechanical, lighting or electrical devices shall be				



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	operated so that noise levels do not exceed 60 dBA (Ldn) at the property line. Additionally, such equipment, including roof-mounted installation, shall be screened from surrounding properties and streets and shall not be located in the required front yard or street side yard. All equipment shall be installed and operated in accordance with other applicable city ordinances. Future Noise Studies: Final noise studies shall be prepared for the future noise-sensitive residential uses prior to issuance of building permits. Each noise study shall finalize the noise attenuation measures described in the Town Center at Moreno Valley Noise Analysis using the precise grading plans and actual building design specifications, and may include additional mitigation, if necessary, to meet the interior noise level standards for residential land uses. These noise studies would utilize any recommendations identified in this study and use the precise grading plans and actual building design specifications to identify any additional noise abatement measures, such as exterior noise barriers and/or building materials (e.g., sound transmission class ratings for windows and doors), if necessary, based on the site-specific noise impacts within these planning areas.				
<u>Threshold b: Less than Significant Impact.</u> The Project's construction and operational activities would not result in a perceptible groundborne vibration or noise. This impact is less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold c: Less than Significant Impact.</u> The Project site is not within an area exposed to high levels of noise from the MARB/IP Airport. As such, the Project	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
would not expose people to excessive noise levels associated with a public airport or public use airport. This impact is less than significant.					
4.14 POPULATION AND HOUSING					
<u>Threshold a: Less than Significant Impact.</u> The Project would include the development of residential, commercial/civic, and park uses, and associated roadways and utility infrastructure that would be used to accommodate the proposed development. The estimated 800 units (3,080 residents) and 421 new employment opportunities resulting from implementation of the proposed TCMV Specific Plan would not directly or indirectly induce substantial unplanned population growth. Impacts would be less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold b: No Impact.</u> The Project site is undeveloped and implementation of the proposed TCMV Specific Plan would not displace a substantial number of existing people or housing. No impacts would occur.	No mitigation is required.	NA	NA	NA	No Impact.
4.15 PUBLIC SERVICES AND RECREATION					
<u>Threshold a: Less than Significant Impact.</u> The proposed TCMV Specific Plan would generate new residents and employees at the Project site, which is currently undeveloped, and would increase the demand for public services compared to existing conditions. With payment of mandatory DIFs pursuant to MVMC Title 3, payment of school impact fees, and adherence to requirements for the provision of parkland, the Project's potential impacts related to public services and facilities would be less than significant and the Project would not result in or require the construction of new or physically altered facilities. No physical impacts would occur and Project impacts related to fire, police, school, park and other public facilities would be less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold b: Less Than Significant Impact.</u> The total parkland demand for the Project (approximately 8.9 acres) would be accommodated by the park and recreational facilities anticipated by the proposed TCMV Specific Plan, and through mandatory	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
compliance with the MVMC Chapter 3.40 of the MVMC, which requires the payment of park in-lieu fees in the event a project does not provide adequate parkland onsite. With adherence to requirements for the provision of parkland or payment of in-lieu fees, and payment of the required DIFs for park and community/recreation center facilities, which ensure that adequate park and recreational facilities are provided to serve Project residents, the Project would not result in the substantial physical deterioration or accelerate the deterioration of existing parks or recreational facilities and impacts would be less than significant.					
<u>Threshold c: Less Than Significant Impact.</u> The proposed TCMV Specific Plan anticipates the development of park and recreational uses, and the physical impacts resulting from construction and operational of these uses is evaluated for each environmental topic in this EIR. No additional physical impacts would result and this impact would be less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.16 TRANSPORTATION					
<u>Threshold a: Less than Significant Impact.</u> The Project, which includes roadway improvements, and features to encourage non-vehicular travel and use of transit, would not conflict with a program, plan, ordinance, and/or policy addressing the circulation system, including SCAG's Connect SoCal, the General Plan, and the MVMC resulting in a less than significant impact.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold b: Less than Significant Impact.</u> The Project's proposed commercial/civic uses meet the Project Type Screening for VMT, and the Project's proposed residential uses would not exceed the City's per capita VMT threshold for the base year and the cumulative year. Therefore, VMT impacts would be less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold c: Less than Significant Impact.</u> The Project would not introduce traffic safety hazards through Project design features or incompatible uses resulting in a less than significant impact.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold d: <u>Less than Significant Impact</u> . Adequate emergency access would be provided to the Project site during construction and long-term operation and this impact would be less than significant.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.17 TRIBAL CULTURAL RESOURCES					
Threshold a.i: <u>No Impact</u> . The Project site does not contain any known tribal cultural resources listed or eligible for listing in the CRHR or a local register of historical resources. Therefore, no impact would result.	No mitigation is required.	NA	NA	NA	No Impact.
Threshold a.ii: <u>Significant Direct and Cumulatively-Considerable Impact</u> . The Project site does not contain known tribal cultural resource sites; therefore, the Project would not cause a substantial adverse change in the significance of a tribal cultural resource. Nonetheless, because the Project site is within a Native American traditional use area, the Project construction activities have the potential to unearth and adversely impact tribal cultural resources that may be buried at the Project site.	Refer to MM 4.5-1 through MM 4.5-5 under Cultural Resources.	Refer to Cultural Resources Threshold a	Refer to Cultural Resources Threshold a	Refer to Cultural Resources Threshold a	Less than Significant Impact with Mitigation.
4.18 UTILITIES AND SERVICE SYSTEMS					
Threshold a: <u>Less than Significant Impact</u> . The physical environmental effects associated with installing the Project's water, wastewater, stormwater drainage, natural gas, electric power, and telecommunications infrastructure is evaluated throughout this EIR and no significant impacts specific to the provision of utilities services have been identified.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
Threshold b: <u>Less than Significant Impact</u> . EMWD would have sufficient water supplies to service the Project. The Project would not exceed the EMWD's available supply of water during normal years, single-dry years, or multiple-dry years.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
Threshold c: <u>Less than Significant Impact</u> . EMWD would provide wastewater treatment services to the Project via the MVRWRF, which would have adequate capacity to service the Project and no new or expanded facilities would be needed.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.



THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<u>Threshold d: Less than Significant Impact.</u> There is adequate capacity available at the Badlands Landfill, El Sobrante Landfill, and Lamb Canyon Landfill to accept the Project's solid waste during both construction and long-term operation. The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure to handle the solid waste.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
<u>Threshold e: Less than Significant Impact.</u> The Project would comply all applicable statutes and regulations related to the management and reduction of solid waste and pertaining to waste disposal, reduction, and recycling.	No mitigation is required.	NA	NA	NA	Less than Significant Impact.
4.19 WILDFIRE					
<u>Thresholds a, b, c, and d: No Impact.</u> The Project site is not within or near an SRA or a VHFHSZ. Therefore, the Project would not expose people or structures to wildfire hazards, impair emergency plans, or exacerbate the spread of wildfires. No impact would occur.	No mitigation is required.	NA	NA	NA	No Impact.